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THE SAINT LOUIS
Medical and Surgical Journal.

SEMI-MONTHLY.

[ESTABLISHED 1843.]

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CHEMICAL REPORTS ON MALTINE.

By R. Ogden Doremus, M. D. LL.D.

PROFESSOR OF CHEMISTRY AND TOXICOLOGY, BELLEVUE HOSPITAL MEDICAL COLLEGE;
PROFESSOR OF CHEMISTRY AND PHYSICS, COLLEGE OF THE CITY OF NEW YORK.

New York, April 17th, 1879.

I have visited the works at Creskill, on the Hudson, where Maltine is prepared, and spent portions of two days in witnessing the chemical processes for making the same. I was particularly impressed with the thorough cleanliness observed, as well as with the completeness of the aparatus employed for accomplishing the desired result—from the first treatment of the grains, to the concentration of the liquid product by evaporation *in vacuo*. The operation is effective in extracting the whole of the nutritive constituents of the grains of malted Barley, Wheat and Oats, with but a slight residue, and the most complete method yet devised, with which I am acquainted, for accomplishing this object.

Maltine is superior in therapeutic and nutritive value to any Extract of Malt made from Barley alone, or to any other preparation of any variety of grain. From a chemical and medical standpoint, I cannot commend too highly to my professional brethren this unique and compact variety of vegetable diet and remedial agent, nutritive to every tissue of the body, from bone to brain.

Respectfully, R. OGDEN DOREMUS.

By Prof. John Attfield, F.C.S.

PROFESSOR OF PRACTICAL CHEMISTRY TO THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN;
AUTHOR OF A MANUAL OF GENERAL MEDICAL AND PHARMACEUTICAL CHEMISTRY.

London, 17 Bloomsbury Square, W. C.
October 28th, 1878.

To Messrs. Reed & Carnrick:

Gentlemen:—I have analysed the extract of malted Wheat, malted Oats and malted Barley, which you term Maltine. I have also prepared, myself, some extract from these three malted cereals, and have similarly analysed it, and may state at once that it corresponds in every respect with the Maltine made by myself. As regards the various Malt Extracts in the market, I may remark that your Maltine belongs to the non-alcoholic class, and is far richer, not only in the directly nutritious materials, but in the farina digesting Diastase. In comparison, your Maltine is about ten times as valuable, as a flesh former; from five to ten times as valuable, as a heat producer; and at least five times as valuable as a starch digesting agent. It contains, unimpaired and in a highly concentrated form, the whole of the valuable materials which it is possible to extract from either malted Wheat, malted Oats or malted Barley.

Yours Faithfully, JOHN ATTFIELD.

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MALTINE with Cod Liver Oil and Pancreatine.
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MALTINE with Phosphates.
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MALTO-YERBINE.

Maltine is now in the hands of the Wholesale Trade throughout the United States.

We guarantee that Maltine will keep perfectly in any climate, or any season of the year.

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During the past year we have received nearly one thousand letters from the Medical Profession in this country and Great Britain, referring to the therapeutic value of MALTINE: *their character is indicated by several extracts which we present below.*

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We have realized decided benefit in a large number of cases treated in the City Hospital and at the Dispensary connected with it, from your preparations of Maltine. Many persons will welcome them as most efficacious and palatable substitutes for Cod Liver Oil, and as covering a wider range of application.

S. WESLEY CHAMBERS, M. D., *Res. Phys. City Hospital.*

BALTIMORE, MD., Jan. 20th, 1879.

We take pleasure in saying in behalf of your preparations of Maltine, that they have fully come up to the measure of your representations. They have given us the greatest satisfaction. We have used them extensively to the great benefit of our patients.

DAVID STREET, M. D., *Res. Phys., Maternite Hospital.*

LOUISVILLE, KY., July 11th, 1879.

I am using Maltine with Pepsin and Pencreatine in my family, and am exceedingly pleased with its results. Professor Flint, of your city, whom I highly esteem, has been consulted about the case and knows the solicitude I have had about it. The above preparation in Sherry, after meals, has been productive of great benefit. I am using it in the City Marine Hospital, the Kentucky Infirmary for Women and Children, and in my private practice, and am much pleased with the results obtained.

T. P. SATTERWHITE, M. D.

JACKSON, MICH., October, 1878.

In its superiority to the Extract of Malt prepared from Barley alone, I consider Maltine to be all that is claimed for it, and prize it as a very valuable addition to the list of tonic and nutritive agents.

C. H. LEWIS, M. D.

ST. CHARLES, MINN., March 23d, 1879.

In conditions of Anæmia, in convalescence from severe and protracted disease, especially in chronic cases where there is great general debility, and in the enfeebled conditions of aged persons, I have learned to rely on Maltine, nor in any instance have I been disappointed of good results, therein forming *a marked contrast, so far as my experience goes, to preparations of Malt, which I had used previously and had abandoned the use of them when my attention was called to Maltine.*

C. R. J. KELLAM, M. D.

---

26 WEYMOUTH ST., Portland Place, LONDON.
May 30th, 1879.

I am ordering your Maltine very largely.

LENNOX BROWN, F. R. C. S., *Sen. Surg., Centl. Throat and Ear Hosp., etc.*

---

75 Lever St., Piccadilly, MANCHESTER, Jan. 16th, 1879.

I have used your Maltine pretty extensively since its introduction, and have found it exceedingly useful; particularly in cases where Cod Liver Oil has not agreed, have I found the Maltine with Beef and Iron most valuable.

J. SHEPHERD FLETCHER, M. D., M. R. C. S.

Edde Cross House, Ross, March 8th, 1879.

I am very pleased to bear testimony to the great value of Maltine. I prescribe it extensively and with the best results, specially in anæmic conditions of the system with much stomach irritability, which it seems to allay very speedily.

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IRON

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The advantages claimed for this form of Iron are due to the absence of free acid, which is dependent upon the perfect dialysation of the solution. The samples of German and French Liquor, Ferri Oxidi Dialys,., which we have examined, give acid reaction to test paper. If the dialysation is continued sufficiently long, it should be tasteless and neutral.

Our Dialysed Iron is not a saline compound, and is easily distinguished from Salts of Iron, by not giving rise to a blood-red color on the addition of an Alkaline Sulpho-Cyanide, or a blue precipitate with Ferro-Cyanide of Potassium. It does not become cloudy when boiled. When agitated with one part of Alcohol and two parts of Ether (fortior) the Ether layer is not made yellow.

Physicians and Apothecaries will appreciate how important is the fact that, as an antidote for Poisoning by Arsenic, Dialysed Iron is quite as efficient as the Hydrated Sesquioxide (hitherto the best remedy known in such cases) and has the great advantage of being always ready for immediate use. It will now doubtless be found in every drug store, to supply such an emergency.

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JOHN WYETH & BRO.

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Pepsin, Pancreatin, with Lacto-Phosphate of Lime and Lactic Acid.

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This pill will give immediate relief in many forms of Dyspepsia and Indigestion, and will prove of permanent benefit in all cases of enfeebled digestion produced from want or proper secretion of the Gastric Juice. By supplementing the action of the stomach, and rendering the food capable of assimilation, they enable the organ to recover its healthy tone, and thus permanent relief is afforded. One great advantage of the mode of preparation of these pills is the absence of sugar, which is present in all the ordinary Pepsin and Pancreatin compounds—in this form the dose is much smaller, more pleasant to take, and is less apt to offend the already weak and irritable stomach. The results of their use have been so abundantly satisfactory, that we are confident that further trial will secure for them the cordial approval of the Medical Profession and the favor of the general public.

Each pill contains one grain of pure Pepsin, and one of pure Pancreatin, which is equivalent to 10 grains of the ordinary or saccharated usually prescribed and dispensed. Physicians will appreciate the great advantage of this mode of administration, the increased benefit to the Dyspeptic being due to a full and effective dose of each, freed from the unnecessary bulk, and really hurtful addition of sugar. A single pill will give immediate relief.

DIRECTIONS.—Take one pill immediately after eating or when suffering from Indigestion, Lump in the Throat or Flatulence. For children reduce the pill to powder and give a fourth or half, according to age.

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The great necessity for a fluid food that would possess *all the elements necessary for the support of the system* having long been felt by the Medical Profession, we call attention to this preparation, containing the *entire nutritious properties* of the muscular fiber, blood, bone and brain of a healthy bullock, dissolved by aid of heat and pepsin, and preserved by spirit; thus constituting a perfect nutritive, reconstructive tonic.

It is not a mere stimulant, like the now fashionable extracts of beef, but contains blood-making, force-generating, and life-sustaining properties, pre-eminently calculated to support the system under the exhausting and wasting process of fevers and other acute diseases, and to rebuild and recruit the tissues and forces, whether lost in the destructive march of such affections, or induced by overwork, general debility, or the more tedious forms of chronic disease. It is friendly and helpful to the most delicate stomach, and where there is a fair remnant to build on, will reconstruct the most shattered and enfeebled constitution. It is entirely free from any drugs. Dispensed in 16 oz. and 12 oz. bottles.

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Is a complete representative of lean and fat beef, bone, blood and muscle. It consists of all the properties which combine in the development of the animal body, which are liquefied by an artificial process, simulating natural digestion, and retaining all of their alimentary values. It contains in their perfection all the natural elements of the meat in their natural quantitative relations, without their extraneous or indigestible properties, and therefore requiring the least possible effort on the part of the stomach for its conversion into chyle, and its immediate absorption by the system.

"This tonic is free from any drugs or chemicals, and is a great invigorator or recuperant. I have used this preparation in several cases of sickness of a character which enables me to give the most favorable opinion of its great value, in extreme sickness. Some of the cases referred to are hemorrhage of the bowels, typhoid fever, bilious fever, inflammation of the bowels, where the greatest possible prostration was present, and in which I found this ment tonic to accomplish results I could not obtain with any other preparation. It is a gentle stimulant, and allays the peculiar irritation of the stomach, which destroys the appetite in all forms of disease, when the tone of the stomach is destroyed."

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Manufactured on the Sea-Shore from Fresh and Selected Livers.

The universal demand for Cod Liver Oil that can be depended upon as strictly pure and scientifically prepared, having been long felt by the Medical Profession, we were induced to undertake its manufacture at the Fishing Stations where the fish are brought to land every few hours, and the Livers consequently are in great perfection.

This Oil is manufactured by us on the sea-shore, with the greatest care, from fresh, healthy Livers, of the Cod only, without the aid of any chemicals, by the simplest possible process and lowest temperature by which the Oil can be separated from the cells of the Livers. It is nearly devoid of color, odor, and flavor—having a bland fish-like, and to most persons, not unpleasant taste. It is so sweet and pure that it can be retained by the stomach when other kinds fail, and patients soon become fond of it.

The secret of making good Cod Liver Oil lies in the proper application of the proper degree of heat; too much or too little will seriously injure the quality. Great attention to cleanliness is absolutely necessary to produce sweet Cod Liver Oil. The rancid Oil found in the market is the make of manufacturers who are careless about these matters

Prof. Parker, of New York, says "I have tried almost every other manufacturer's Oil, and give yours the decided preference."

Prof. Hays, State Assayer of Massachusetts, after a full analysis of it, says: "It is the best for foreign or domestic use."

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Prepared in accordance with the direction of the Physician who introduced this purely

Medicinal Food for Consumption and Wasting Diseases.

Pancreatic Emulsion will always take precedence of Cod Liver Oil by reason of its introducing the STABLE SOLID FATS INTO THE SYSTEM instead of the evanescent fluid fats or oils.

Neither Cod Liver Oil nor EMULSIONS OF COD LIVER OIL can supply the kind of fat necessary for sound and vigorous human life. In addition to this, all the Oily Emulsions are liable to rancidity, and most of them are highly objectionable in consequence of the SAPONIFICATION and ULTIMATE PUTREFACTION, produced by the chemical agents used instead of Pancreatic Juice.

Pancreatic Emulsion (properly so-called), is THE NECESSARY FOOD FOR THE CONSUMPTIVE, and the most reliable form of nutriment for counteracting the tendency to Phthisis and other wasting diseases. It presents to the lacteals fat in essentially the same condition for assimilation and absorption as in a vigorous human frame, and THE AGENT of the important change is THE NATURAL SECRETION of the PANCREAS.

Pancreatic Emulsion, may therefore be regarded as Chyle obtained by nature's own process. In certain cases both Cod Liver Oil and Pancreatic Emulsion are required—one to supply the blood with oil or liquid fat, the other with the more stable solid fats; but it cannot be too strongly urged that both PANCREATIC EMULSION and Cod Liver Oil are *not to be regarded as Medicines, but as articles of diet*, without which patients, with their defect of health, will as surely starve as healthy persons would if deprived of the most nutritive part of their food.

Pancreatine, effects the digestion and assimilation of Cod Liver Oil and Fat, as well as Food generally. This palatable and popular remedy is therefore invaluable to PATIENTS WHO ARE UNABLE TO DIGEST COD LIVER OIL, and who are thus deprived of its nourishing and invigorating properties.

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And containing the

Highest Amount of Nourishment

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Most Digestible and Convenient Form.

The most perfect substitute for healthy mothers' milk.

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ARTICLE XVIII.

ON THE EARLY DIAGNOSIS OF STONE IN THE BLADDER. By W. HUTSON FORD, M. D., of St. Louis.

PART I.

In a very important address, delivered in 1873 by Sir Henry Thompson, before the Midland Medical Society at Birmingham, after defining the class of cases to which the operation of lithotrity is applicable, the distinguished speaker used the following language: "The only certainty of success lies in getting the stone to operate on when it is small; and, success being absolute then, it follows, as a matter of necessity, *that the diagnosis of stone in the bladder and of its size, is a matter of the highest importance.* Granting me this, and the unrivalled success of lithotrity for small stones, already proved, it logically follows that the operation of lithotomy must in future be rejected for all stones which are of a moderate size." [For a consideration of the relative position of the two operations, I beg leave to refer to an article of mine, entitled, "The Province of Lithotrity," published in the ST. LOUIS MEDICAL AND SURGICAL JOURNAL for May, 1878.]

Thompson further states that he has come to the conclusion

that stone in the bladder, like many other maladies, is an *exterminable* one. "The plague," he says, "in Europe, is now a matter of history; — small-pox, an anachronism, without right or title to existence, showing itself only because some people are foolish or ignorant." Cholera must equally become subject to medical control. Lithotrity must be the future operation for stone in the adult. "Find a man's stone," says he, "while it is small, and you are certain to save him." By following this hint, we shall arrive one day at the end in view, viz., the *extermination of stone in the adult*, so that, as he writes a year or two later, the rising generation of medical men will see the day when lithotomy for adults will disappear, or at least become one of the rarest of operations."

In sympathy, as it seems, with the foregoing remarks, quoted from Thompson, Holmes observes: "No delay is admissible in cases of stone. When the symptoms become more accurately known to the public, and the necessity of seeking competent advice at an early period is generally recognized, stones will be disposed of when of small size by lithotrity, lithotomy in the adult will become an even rarer operation than at present, and stone will be only rarely a cause of death." ("Surgery, its Principle and Practice," p. 814.)

Lithotrity in the future, except in its modification by Bigelow, a procedure as yet, however promising, distinctly upon trial, will be restricted to stones less than an inch and a half in diameter, unless the calculus is very soft. Some stones, even of this size, composed of uric acid, or of phosphates with an oxalate of lime nucleus, or of oxalate of lime alone, in rare instances, cannot be safely crushed. But even the hardest stones may be crushed while smaller than one inch in diameter, and we must bear in mind that every stone has once been small — once in its history therefore, removable with comparatively little risk to life. Every large stone is a witness of lost opportunity, and its presence beclouds the reputation of the medical man, who, knowingly or misunderstandingly, has allowed it to grow, or testifies to the obstinacy, timidity or ignorance of the patient and his friends. The early recognition of calculus, with a view towards its immediate removal, has not received, says Thompson, its full share of consideration from the profession in England; and the same proposition may be affirmed with regard to his country, with at least equal confidence. Notwithstanding

the devotion of many operators of the Eastern States, lithotrity has been sadly neglected in America, and, indeed, it is not at all unusual for practitioners, knowing of the existence of a stone, either to allow the patient to refrain from submitting himself to operation, or to encourage him to do so, until by long sojourn and the consequent increased size of the calculus and gravity of the symptoms, *lithotomy*, the only operation in general contemplated either by family physicians or professed surgeons, is no longer to be avoided, with all its risks.

In the address alluded to above, Thompson takes the rather novel, but undoubtedly correct position, of insisting that this early diagnosis of calculus in the bladder, upon which the safety of the patient hangs to so great an extent, should be established by *the family physician*, and not necessarily by a surgeon at all. "It may be said," he observes, "that when the physician suspects stone in the bladder, he can always send him to the surgeon to be sounded." "But," he asks, "why this division of labor? Why should not physicians equally send their patients to the surgeon to be stethoscoped, since it is a mechanical process, like sounding for stone, designed to ascertain the condition of internal parts? Why should there be one diagnostician for the outside of the body, and one for the inside?" Is it not altogether best, that the diagnosis of stone, which eventually includes striking it with a metallic rod, be made out, at least with comparative accuracy by the man who is in continual contact with the patient, and most likely to be informed of the earliest symptom in his capacity of attending physician? His functions need not be operative, but should certainly be diagnostic, so that the patient may enjoy the great advantages of timely surgical treatment.

There can be no doubt of the judiciousness of this view, and I have several times known of instances where early operation has been secured by the attentive sagacity of the family physician, who has himself made the diagnosis, but if medical men are to be expected to sound the bladder for stone, a good knowledge of the main indications for so doing, and of the proper methods of sounding, is indispensable. The physician must learn to sound the bladder, just as he learns to sound the uterus, or to practice auscultation and percussion, or any other method of physical diagnosis. There is no reason whatsoever why sounding for

stone should be the only diagnostic process, hardly ever practiced except by professional surgeons.

It is plain, that in order to make an appropriate and timely use of the sound, a clear knowledge of the symptomatology of the conditions of the urinary organs, where a stone might be present, is highly desirable in every medical man who, in the capacity of attendant or consultant is entrusted with the care of families. With a view to set forth in a distinct light, and in as practical a way as possible, the indications for sounding and the differential diagnosis of calculus, I have ventured, in the following pages, to enlarge somewhat upon Thompson's valuable suggestions. If stone in the adult and lithotomy for large stones are to become things of the past, and so many needless dangers to human life thus averted, these desirable ends can only be attained through the watchful care of practitioners in general, who, by sounding the note of warning in time, will forestall conditions that no surgical skill can prevent from leading on to a disastrous issue in a large number of cases.

The early history of stone will depend upon its origin, for a calculus found in the bladder may have been formed around a small stone which had dropped from the kidney, or may be the result of phosphatic or other deposition, in part of the constituents of the urine around foreign bodies introduced from without, or as the result of a concretion of vesical mucus and phosphatic matters in sulci or pouches of the bladder, as happens not infrequently after the operation for vesico-vaginal fistula. Multiple calculi again may be due to the concretion, in numerous small masses, of crystalline deposits of the urine, precipitated both within the kidney and the bladder. Calcareous concretions also producing most of the symptoms and effects of a movable calculus, are not uncommonly met with adhering in large quantity to the walls of the bladder after operation. Stones of renal or vesical origin may be further increased by deposits formed around them in the prostatic, membranous, or even penile urethra—and certain concretions analogous to true calculus may originate in the prostate, occupying the secretory cavities of the gland and becoming voluminous and hard by the progressive deposition of urinary salts.

Calculi may thus be designated as of renal, vesical or prostatic origin. Those of renal orgin, are in nearly every case

dependent upon a constitutional dyscrasia; but in the bladder, although the causes first giving rise to the concretion in the kidney continues to act, thereby augmenting its size, the kindling of chronic cystitis, and the associated decomposition of the urine, sooner or later causes a deposition of phosphate around the mass, which may alternate with deposits of other kinds. This almost surely occurs around foreign substances lodged in the bladder, urethra, or even behind the corona-glandis, under the prepuce, in cases of phimosis. I have seen formations of this kind numbering twenty or thirty, and varying in size from a bird shot to a small bean or coffee grain, lodged in the balano-preputial sulcus, where circumcision in an adult revealed them, having been deposited from the stagnant urine pent up around the glands, in consequence of a narrow preputial orifice.

The great majority, nineteen out of twenty, of those stones which have a constitutional origin, viz., which are not formed wholly by decomposition of the urine in the kidney, bladder or urethra, but by the deposition of material abnormally present in the blood, are composed of uric acid. In about five per cent of such stones due to vitiated nutrition we meet with one composed either of oxalate of lime, phosphate of lime, of cystine, or very rarely xanthine. About three-fifths of all stones, says Thompson, are of constitutional origin, the other two-fifths comprising stones due to ammoniacal decomposition of the urine, and incrustation of foreign bodies or of the vesical and *urethral* walls.

As uric acid stones comprise nearly 60 per cent of all calculi, the early symptoms will in the majority of cases bear a direct relation to the natural history of uric acid in the economy. Uric acid is now admitted to be formed in the liver as a stage in the production of urea. An abnormal amount of urea or of uric acid in the urine, necessarily signifies undue hepatic activity. At the same time the failure of uric acid to assume the normal form of urea, a transformation which would appear to be accomplished by a kind of fermentative process, leads us to suppose that hepatic action is not only redundant, but simultaneously perverted. The coloring matter of the urine is derived from splenic and hepatic action upon worn out blood corpuscles, and perhaps upon bile reabsorbed from the intestine, and its quantity seems to depend upon the activity of the hepatic functions. At least, after febrile attacks, or bilious derangments, etc., when the liver has been temporarily affected, renewed and increased action

attendant upon returning health, is always accompanied with increased amount of urea in the urine and with a high coloration.

Now this high coloration, in the *lithic acid diathesis* which we are considering, is very apt to excite attention, especially in adults. Though quite frequent in children, it is not so common with them as with older subjects. Very often in these cases, a clear history of ancestral gout, gravel or stone can be obtained. A copious deposit of urates is to be observed upon the bottom and sides of the utensil into which the urine is passed. If a portion of freshly voided urine be allowed to settle in a conical wine glass, and the deposit examined microscopically, the well known rhomboidal, orange red, single or grouped crystals of uric acid will be seen intermixed usually with urates. The agglomerations of individual crystals may be large enough to be felt beween the fingers, or seen by the unaided eye. Some of them may be as large as a grain of sand, of gravel, or even shot. This is what is called "the gravel." Marked irritation accompanies the passage of urine of this kind. Uric acid is exceedingly difficult of solution, practically insoluble in pure water, and held in solution in the urine in small proportion only by the action of its temperature and the salts it contains.

When separated from the blood by the kidney it tends at once to assume the solid crystalline form, and does so very promptly, while still within the urinary passages if in redundant quantity. The deposition of these fine crystals which are very hard and sharp, as in the similar case of oxalate of lime, produces early and marked irritability of the urinary passages, evinced by frequent micturition and ardor urinæ. Occasionally the patient ceases to pass these concretions, but after a time voids them with much pain and vesical tenesmus in unusual quantity, perhaps with some blood, in what is called a "fit of the gravel." By voiding these crystalline masses, before they have become agglutinated together, as sometimes happens, the formation of a true stone is fortunately prevented. It is probably in consequence of the absence of any unusual quantity of mucus in the urine and of any associated ammoniacal decomposition, that as yet there is little or no disposition towards a deposition of phosphates.

This lack of secondary phosphatic deposition must be regarded as the condition by means of which the various sandy or grit-like particles lodged in the bladder and in contact with each

other, refuse to adhere to each other. As long as the patient therefore gets rid of less gravel, continuously, or by "fits," it is not likely that a stone will form, especially while the urine remains clear; but there are numerous exceptions to the last remark. Should the patient cease to pass sand or gravel for any unusual period, the probability that a stone is forming becomes very considerable. In all cases of this kind, the patient should be sounded without delay.

In other instances there is no ascertainable history of uric acid sand in the urine, but there is a history of nephritic colic, marked by sharp pains in the lumbar region shooting down into the testicle or the thigh, and lasting for several hours, or even for a day or two. Relief is sudden when the calculus drops from the ureter into the bladder. If the kidney-stone be small, or the ureter unusually dilatable or of large size, a calculus may pass from the kidney without exciting any immediate symptoms whatever, indeed altogether without the patient's knowledge. With or without an attack of nephritic colic, therefore, a stone may drop into the bladder, and after a few days, or even hours, may be passed by the urethra, if not too large. An intelligent patient will bring it to his physician, who will find it to be roundish, of granulated exterior, and most likely to consist of uric acid, with some pulvirulent, fawn-colored matter upon its surface. The patient's urine will be found acid, and on cooling will let fall an abundant crop of rhomboidal crystals of uric acid.

It is safe to conclude that when a calculus of this kind has been voided the patient will some day void another like it, and sooner or later retain one in his bladder. In every such case, therefore, it is quite within the bounds of reasonable probability that a similar calculus *already exists* in the bladder, too large to pass, especially when an unusually long period of time has elapsed since the passage of the last one. Such a stone, too large to pass by accidents of shape, composition and size, may wholly fail to produce very noticeable symptoms, while smaller calculi are voided as they arrive from the kidney. The passage of a calculus, therefore, is a peremptory indication for the use of the sound.

It is not at all unusual for a kidney-stone to become lodged in the prostatic urethra, or just behind the bulb in the membranous urethra, or even in the penile portion behind a stricture.

Here it may remain a very long period, and grow by local accretion. It may grow backwards towards the bladder, forwards, or in all directions more or less uniformly. I have extracted such a stone which had remained in the membranous urethra over twenty years, attaining a size of an inch in diameter, a constant source of distress and occasionally of very acute symptoms, which however had not prevented the subject of it from marrying and having two children. Another stone lay in the bladder and was simultaneously and successfully extracted. This accidental impaction is more frequent in children on account of the small relative size of the puerile urethra. The most striking symptoms are great pain in making water, a marked diminution in the size of the stream, often with overflow, especially when the bladder is full. This symptom occurs both in children and adults, but is most marked in children, because the stone prevents a perfect closure of the urethra either by contraction of its vesical orifice or of the muscles surrounding the membranous portion, the prostatic sinus, in which in most cases the stone is lodged in adults, being as yet in children undeveloped, and too small to contain the stone.

Frequent and painful micturition, therefore, in adults with persistent pain in the perineum and penis, and pain on defecation, with or without dribbling of urine, and acute incontinence in children, accompanied with straining and pain in micturition, and the usual pulling at the foreskin and glans, constitute indications for the use of the sound, of an imperative character, even although the urine be clear, and no blood has ever been passed.

Stone sometimes forms insidiously, the symptoms being latent or very slightly or vaguely expressed for a long period. All at once they explode and thoroughly awaken the patient and his friends to the fact of grave trouble in the urinary organs.

Cystitis is frequently absent in children who have carried a stone for several months, the urine remaining clear and free from pus or mucus. Although the bladder usually declares its intolerance of the foreign body by an exaggerated irritability, cystitis is but slowly awakened. At a more advanced age, and especially in late adult life, the presence of stringy muco-pus in the urine is observed much sooner, even when the stone is comparatively small, if its sojourn in the bladder has been prolonged. A small stone lodged behind an enlarged prostate in

elderly men, and thus prevented from coming into contact with the neck of the bladder, may fail for a long period to give rise to any noticeable symptoms.

However originating, when a calculus in the bladder has attained any considerable size, the symptoms are too marked to escape attention. The frequent micturition by day rather than by night, (the reverse of prostatic hypertrophy, prostato-cystitis, etc.) the occasional bleeding, the almost invariable cloudiness and purulence of the urine, the occasional stoppage of the stream, the pain in the penis and its glans towards the close of micturition and for ten or fifteen minutes after the act, the not infrequent pains in the legs, feet, loins, and even distant parts of the body, when the desire to make water comes on, the aggravations of all the symptoms after unusual or rough exercises, especially on horseback or of a jolting character, constitute conditions which almost certainly point to the existence of a stone in the bladder, when most or all of them are observable. When only a few, though not the least conspicuous of these signs are manifested, the existence of a calculus is far less certain. Symptoms closely simulating those of stone in the bladder are often present in chronic inflammation of the prostatic urethra and neck of the bladder and some diseases of the rectum and prostate. In prostato-cystitis we may have a stoppage of the stream during micturition, of spasmodic character, due to reflex spasm of the muscles surrounding the membranous urethra. Here we also encounter frequent micturition, acute pain during and after the act, cloudy and purulent urine, often of a very marked and persistent character, and occasional bleeding, a cortege of symptoms wonderfully like those proper to stone. Indeed we must not forget that nearly all the symptoms of stone are due to a cystitis of the surfaces brought into contact with it, mostly in the neighborhood of the neck of the bladder in the early stages of the affection during which period it is especially apt to be confounded with other conditions. Before having recourse to the sound, however, a careful consideration of the case will in most instances enable us to form a correct diagnosis, at least so far as this may bear upon the advisability of sounding. In stone, the symptoms are always more marked by day than by night, and are especially aggravated by rough exercise; this is not the case to anything like *a similar degree*, in any form of prostatic or prostato-cystitis. The pain in the penis is felt as an occasional

darting twinge accompanied by dull and dragging sensations in the loins, perineum, inner side of the thighs, and particularly in the small of the back, in prostatic and vesical disease not due to stone. There is also acute pain attendant upon the close of micturition, and persisting for *some time after that act*, as in stone, but these symptoms yield to *treatment addressed to the cystitis*, which does not happen to any appreciable degree when there is really a stone.

Both when calculus exists, and in the pronounced and very distressing cases, here considered, these pains, however different in degree, have a similar origin, viz., contusive pressure upon the inflamed and hypersensitive lining membrane of the bladder near its outlet—in one case by the contraction of the bladder upon a calculus towards the close of micturition and afterwards, until a certain quantity of urine is again poured into the bladder, and in the other by the contraction of the muscular layer of the organ upon the inflamed mucous coat itself. In prostato-vesical catarrh the desire to make water becomes so imperative as to be very painful and quite irresistible, but this pain is almost at once relieved by the expulsion of the urine, which is highly irritating in most such cases, either from acidity or ammoniacal causticity. A similar state of things exists in hypertrophy of the prostate, after prostato-cystitis has been kindled. In stone, on the other hand, the painful desire to make water, which in all cases of bladder trouble is significant of some grade of cystitis, or of conditions directly causative thereof, is greatly aggravated during micturition by the grasp of the bladder upon the rough calculus. This pain, it is important to note, persists *in full intensity* after micturition; so intensely, indeed, as to make children scream out and become utterly unmanageable, and to evoke in adults expressions of great agony. After the lapse of some ten minutes or more the pain abates, and ceases when enough urine has again entered the bladder to lift its coats away from the irritating surface of the calculus. Nothing so strongly marked as this, except in very unusual cases, is seen in any form of inflammation of the bladder or of the neck, which is not complicated by the presence of a stone.

Additional light is also thrown upon the case by its history. Prostato-cystitis is not seen in childhood, being an affection directly linked to the venereal functions of the organ concerned. In young men it is a sequel of gonorrhœa, and an accompaniment

of gleet or of stricture. In older men, especially unmarried ones, it is often induced by irregular and immoderate sexual indulgences. Impairment of the hepatic functions, the influence of malaria, high living, a gouty or rheumatic diathesis, and old stricture and prostatic hypertrophy must be ranked as its most usual predisposing causes.

Whenever there is any reasonable doubt, however, it will be expedient to examine the *urethra and* the bladder with the sound. Indeed, it may be formally stated, that whenever a chronic cystitis proves unamenable to treatment, it becomes desirable to sound for stone, for we should, in such a case, suspect the existence of some local cause of irritation, whatever this may prove to be, as we justly suspect the malignant nature of internal diseases when they prove rebellious to treatment, or of ulcerations which recur or absolutely refuse to heal, provided positive characteristics of benignity are absent. In hypertrophy of the prostate, prostato-cystitis is sooner or later kindled, and when in such a condition the desire to pass water is unusually frequent, and where dragging pains in the perineum or rectum, or in the penis or loins, are likewise observed, it will be also proper to sound, for a stone frequently forms in the bas-fond of the bladder and maintains and aggravates all the symptoms. We will not, most probably, have any bleeding, except perhaps after unusual jolting or horseback riding, nor the characteristic pains during and after micturition, for the stone cannot come into contact with the tender and sensitive neck of the bladder, and, as the bladder is unable to contract perfectly, its coats can seldom be wounded by contact with the calculus. The ammoniacal fermentation and chronic cystitis which sooner or later complicates prostatic hypertrophy, and especially the incomplete emptying of the bladder, are conditions highly favorable to the formation of a calculus, whose growth would be marked by the symptoms proper in the dominant affection. Partial atony of the bladder exists in all cases where a considerable quantity of urine is retained, and the atony may even be complete in more advanced cases requiring the habitual use of the catheter. Here the conditions are practically identical with those attendant upon diseases or injury of the spinal cord adequate to produce paraplegia. The origin, or at least the growth of the calculus, or deposition of incrustations, is in both cases due to stagnation of the urine with ammoniacal fermentation.

Phosphatic stones, for similar reasons, are very apt to form during chronic cystitis induced by stricture; the bladder becomes more or less sacculated, and the sacculi are necessarily atonic, being devoid of a muscular coat. This is especially the case when the stricture is an old and tight one. In such cases, by the usual mechanism, the muco-purulent secretion of the inflamed parts, sooner or later, acts as a ferment upon the urine and induces a fermentation of the urea, with evolution of ammonia. The urine is stinking, ammoniacal and exceedingly irritating, and still further aggravates the cystitis. A vicious circle is thus formed, which can only be broken by the removal of the stone and a daily cleansing and perfect emptying of the bladder. Phosphates accumulate in the bladder unless this is done, and many eventually agglomerate into a calculus. So likewise, in virtue of the induced cystitis, and possibly at first even without noticeable inflammation, phosphates are quickly deposited upon all foreign bodies left within the bladder by design or accident. Whenever, therefore, as a general rule, the symptoms of vesical inflammation persist for an unusually long period, or prove uncommonly obdurate, after or during the treatment of stricture, hypertrophy of the prostate, or in paraplegic conditions, even *in the absence of other signs* of stone, the use of the sound, repeated until certainty is attained, must be regarded as an imperative indication.

In children, the presence of a calculus in the bladder gives rise to marked symptoms, even before any blood has been passed or the urine becomes at all cloudy or purulent, in perhaps the majority of cases. The frequency of micturition, in spite of an evidently great aversion to the act, the desire to pass water while lying on the back, which the child learns by experience lessens the pain, the straining, coincident hernia, prolapse of the rectal mucous membrane, the frequent erections, habit of pulling at the prepuce, and the prolonged cries when making water, are very characteristic of the presence of a stone either in the bladder *or urethra*.

We may now summarize the indications for sounding, as follows:

1st. Where a patient habitually passing gravel has ceased to do so for some months, especially if unusual frequency of mic-

turition, with pain during and after the act, and an occasional stoppage of the stream of urine be observable.

2d. Whenever a calculus has been passed.

3d. When dribbling of urine in children or adults is associated with painful and frequent micturition. Here the calculus may be lodged in the urethra.

4th. In rebellious and somewhat doubtful cases of prostato-cystitis.

5th. In hypertrophy of the prostate with partial atony and chronic cystitis, where the bladder symptoms are unduly pronounced.

6th. In cases of long standing stricture where chronic cystitis cö-exists.

7th. Where frequent micturition coincides with pain during and after the act, even although no blood, calculus, nor gravel has ever been passed, and where there may not be any history of nephritic colic.

8th. In the typical cases, where stoppage of the stream of urine, frequent urination by day, pain during and after the act, occasional bleeding, pain in the hypogastrium, inner sides of the thighs and perineum, aggravated by rough exercise and turbidity and offensiveness of the urine, exist; and where, in children, most of these signs are associated with others peculiar to childhood, such as inguinal or umbilical hernia, prolapse of the rectum, pulling at the prepuce and frequent erections, etc.

9th. In the female sex the indications are modified by the proper anatomy and functions of the pelvic organs. Calculi in females are mostly phosphatic, being formed by concretion around foreign bodies introduced into the bladder, by the deposition of urinary salts in the pouch of a cystocele, or occasionally by a similar mechanism, after operation for vesico-vaginal fistula, where cicatrical distortions give rise to the formation of pouches from which the urine can neither be expelled nor washed out. Renal calculi pass without difficulty through the capacious, short and dilatable urethra of the female; stones of even an inch in diameter frequently do so in the adult. Unusually large stones, however, occasionally become impacted in the urethra, both in children and adults, and attract attention by the ischury and dribbling to which they give rise. Moreover, on account of the situation and easy drainage of the female bladder, crystalline deposits, or even gritty agglomerations of such deposits, alto-

gether fail to induce any degree of vesical irritation at all comparable to that observed in the male sex. For these reasons, stone in the female bladder is a rare occurrence. With women, bladder trouble points, in the vast majority of cases, in the direction of *the uterus or the kidney*, and not towards calculous disorder. Under puberty, this is somewhat otherwise. As doubt nevertheless will occasionally obtain, even in adults, and in order to avoid error by assigning vesical symptoms to a uterine origin, when such symptoms are found to be intractable, or inexplicable by uterine pathology, an examination should be made with a uterine sound, passed through the urethra, while the finger of the left hand in the vagina supports and elevates the floor of the bladder.

Translations.

FROM THE ITALIAN.

STORIA COMPENDIATA DELLA CHIRURGIA ITALIANA. DAL SUO PRINCIPIO FINO AL SECOLA XIX. Del Professore CARLO BURCI. [For the JOURNAL.] JOSEPH WORKMAN, M. D., Toronto, Canada, Translator.

COMPENDIATED HISTORY OF ITALIAN SURGERY—CONTINUED.

In GERMANY, although in the period of time (17th century) of which I have been treating it boasted of universities and of eminent physicians, the study of surgery was incomplete, barely tolerated, and its progress slow and difficult. The art, left for so many ages in the hands of a rude and ignorant class (barbers and bathers), was held in contempt, and was especially reviled by the physicians, who, by their cunning, and for their own interests, kept it under foot.

In AUSTRIA it was indebted to the protection of the Emperor, Joseph II., who, being philosophic, understood that surgery would be unable to make, for the good of the country and of the army, that progress of which it was capable, unless it were emancipated from that servility and slavery in which it had been held. He conceded to the surgeons prerogatives, rights, titles and honors, which befitted scientific men. He erected civil and military hospitals, and in that of Vienna he founded a school of medical surgery, the first in Europe, and endowed it with six chairs, given to able men, whom he had, at his own expense, sent to the various celebrated schools of Europe, and he endeavored to enrich the new institution with all those means which might aid the progress of art, as anatomical museums, a rich library, abundant apparatus, and whatever else could give lustre to surgical studies. Annual premiums for the scholars were established, and for the masters, salaries large and sufficient, with honorable repose. After so much done by Joseph II., surgery in the Austrian empire was made secure, nor has it since declined.

In PRUSSIA the King had, in 1714, caused the opening of an

anatomical theater, and in 1744 the medico-chirurgical college came into existence. Frederick the Great had in his army many very clever men, as Bonneas, Shinner, Reo, Thedau, Bilguar, Nuosisma, although the majority of the civil surgeons were then but little instructed and capable only of treating wounds and opening abscesses. It was only at the end of the last century that grand Germany was able, following the example given by Joseph II, to raise herself to a like altitude in surgical discipline, and to attain to the level of other civil regions, which in some specialtias she may now even surpass.

[We shall now take up the sequel of German surgical history, given near the conclusion.]

In Germany the progress of surgery was slow, whether from the abject state in which the people and the government held the surgeons, who were constrained to make fellowship with barbers and bathers, and were therefore ignorant and plebian; or from the cruel tyranny of the physicians, who, eclipsing them with their togas, drove them to live in humiliation and disrespect. A German physician of those days would have believed he had defiled himself and prostituted his dignity, should he in any way have given his hand to surgical work. How much was Italy and for how many ages in advance?

Lorenzo Heister, a man of marvelous genius, was the first to give honorable life to German surgery, and as he was at once a physician, a botanist, an anatomist and a surgeon, he confronted with his authority and knowledge every one who endeavored to humiliate the art, and to repudiate it from medicine. He recommended it to governments, universities and academies, and fraternized it to medicine, and he was a beneficent and wise promoter of surgical studies.

If Germany was tardy, in comparison with Italy, France and England, in promoting the advancement of surgery, on the other hand, in Prussia on the Rhine and in the small German States, the progress in its fostering, and a particular zeal and love for its cultivation, were rapid. The history of surgery then, and in the second half of the last century, displays such a number of published works, and of masters in the art, especially in military surgery, obstetrics, the study of diseases of the bones, hernias, wounds, etc., as to render it very difficult to the writer of a short summary to offer a correct account of them. Having signalized *Lorenzo Heister* as the father of German surgery, it

might be a pleasure to me to proceed to an enumeration of some of those learned men who, by their labors and teachings, raised the art of surgery to honored splendor, diffused it rapidly by their works, their words and their example, and in a short time placed it on a level, if not indeed in some parts above its position, in the most cultivated nations of Europe.

[The author then introduces a long roll of distinguished surgeons and their published works, covering the period between 1737 and 1813. The following are the names of the more celebrated: Richard Peter Garick, Eller, Reht, Frederick Christian Boerner, Platner, Acrel, Barth, Ludwig, Schmidt, Brunner, Jaeger Beer, "and above all, *Richter*." Of the last named, the author speaks in very eulogistic terms, and it would hardly be just to abstain from reproducing some portion of the honorable record of this distinguished person]:

AUGUSTUS GOTTLIEB RICHTER was born in Saxony, in 1742. He studied at Gottingen, with his uncle, a physician and professor of therapeutics in that celebrated university, and he there received his degree of doctorate, in 1764. He then visited London, Paris, Amsterdam and Leyden, always observing and studying. Having returned to Gottingen, he was, in 1771, appointed ordinary professor of medicine; then, in 1779, chief physician to the King; and, in 1782, aulic councillor. For the long period of forty-six years, he continued to teach and to practice with high renown, and he was a glory to that school, not soon to perish, in which he was admired in the chair equally as he was at the bedside of the sick. His instructions were a store of science and just criticisms. He dedicated himself especially to the study and advancement of surgery, and after the death of *Heister*, he became the most celebrated and illustrious surgeon of Germany. He died in 1812, old and venerated. Richter applied himself to oculistry, general surgery, medicine and medical history.

[The author here presents a long catalogue of Richter's published works, amounting to some sixteen, on a variety of subjects, chiefly surgical, which he closes with the following encomium]:

The works of Augustus Richter, which most widely spread

his fame, as well because of their vastness, as of their opportune appearance, were his "Fasciculi Observationum Chirurgicarum" (1770, 1776, 1780); his "Magna Bibliotheca Chirurgica," in fifteen volumes (1771 and 1779); his "Medico-Chirurgical Clinical Observations" (1793); and his "Elements of Surgery," which, in numerous translations, ran over all Europe.

After Richter, then followed in oculistry, Hoenler, Schiferly, Conradi, Weissenborn, Wrisberg, Oehmen, Nootnagel, Plenck, Schmucker, Wenzel and others. In other branches of surgery should be recorded Smucker, Murino, Hoelpin, Nagler, Fiker, Weber, Weimann, Bruning-heussen, *Camper*, Venel, Greve, Gesches, and a long series of able pathologists, who shed light on surgical pathology.

The labors of *Camper* on hernia are worthy of particular notice. He was the first to give proper instructions for the employment of the soft pads, and those most effectual in preventing descent.

I cannot take leave of the subject of the progress of German surgery without noticing the advance made in obstetrics and the treatment of the diseases of women, although but a short time had been given to the men who cultivated this important branch of surgery, for which institutes were founded, and schools established for its more complete teaching.

It was *Van Swieten* who urged Maria Theressa, Empress of Austria, to lay down rules for the study of obstetrics; for which purpose she sent to Paris, where Levret then flourished, the surgeon Kranz, who afterwards became professor of the art in the school of Vienna, and Director of the Maternity. The Viennese institution was afterwards imitated in Florence and Milan, under the auspices of the same sovereign. Germany was not deaf to the inviting call thus uttered. After the obstetric institution of Vienna, the private one of Melitsch, at Prague, arose; next, the public one at Berlin (1757), where Meckel, Fried, Henckel and Wefgen figured; then that of Gottingen, with Roederer at its head; that of Cassel and Magdeburg, illustrious by Stein, who was the greatest obstetrician of Germany in the last century.

The surgeons of HOLLAND were not slow to profit from the lessons given by their neighbors. Roonhuysen invented the *lever*, but made of it a monopoly, and a secret in his family. It was afterwards described by Vischer, Van de Poll, DeBrugen, and more particularly by DeBree, of Amsterdam.

[QUERY.—How long would Roonhuysen's lever have survived publicity? Is any medical *secret* worth a cent?]

The obstetric schools of Germany gave impulse to those of Copenhagen in Denmark, and of Petersburg and Moscow in Russia, through the works of the physicians Condoidi and Erasmus, but in an especial manner through those of the chief physician, Mohnenheim, who, although first physician to the Czar, did not disdain to wait on poor parturients. He published a treatise on "Obstetric Art" (1791), which was received with eagerness and applause. Obstetrics, both as an art and a science, at the end of the last century, was diffused throughout Europe, and numbered able scientific men, who cultivated it with love, and taught it in renowned schools, in which the instruction of nurses and midwives was not neglected.

In FRANCE, after the splendid light which the great *Ambrose Paré* and his school had diffused, surgery, in the second half of the 17th century—continually persecuted by that medical faculty always averse to surgeons, and ever dreading to lose their sovereign sceptre of official teaching of the healing art—declined. Two men, however, illustrious and highly meritorious, raised her from her humiliation. These were Bienaise and Roberdeau, who privately and at their own expense, opened schools, taught surgery, and paid their demonstrators. The example proved admonitory and fruitful. Louis XV., in 1671, reinstituted the school of surgery, took it from the physicians, and confided it to a surgeon of great ability, Dionis, who taught anatomy and surgical operations with universal applause. Felix, Clement, Mareschal and Breissier, who were in great reputation at court for having cured the King of a fistula in ano; also Duverney, Littre, Merg and Winslow, protected and aided the new school, to which a great many auditors flocked. The surgeons of the hospitals conducted their friends and the students to the beds of the sick; and thus theoretical, practical and clinical studies, in the capital of France, prepared the way to the revival of surgery.

Saviard, in the Hotel Dieu; Mareschal and Jolet, in La Charite, and Mauriceau in the obstetric halls, called their students into the practice of the art, and then arose Petit and Lapeyronie, great surgeons, enthusiasts in their art, and propagators of it; men who sacrificed everything in order to fulfill their duty.

Louis XV., having admired their zeal and the evident utility of their teaching, in 1724 founded the surgical school of St. Cosimo, which came very near being devastated by the fanaticism of the medical faculty, who, having marched to the school in solemn pomp, with a skeleton as their standard, were hissed and led back by the populace to their starting point, and thus the school was saved.

From this sanctuary of surgical art, which had as its benefactor and protector Lapeyronie, who, while he lived, consecrated himself to the lustre of the school, and after death bequeathed his fortune to institute a library, an anatomical theatre, annual prizes, and everything which might be necessary to the improvement of the art. Afterwards had birth the Royal Academy of Surgery, that areopagus of great fame and universal authority known to all. Thenceforth surgery in France had its grandeur, independence and honor, and it had still more, when a declaration from the King, in 1743, separated the surgical body from the barbers, instituted academic degrees, and prescribed for masters in surgery rigorous examinations. At that time arose Chopart, who taught the practice of surgery; then came Desault to light, a bold and learned surgeon, whose school had a salutary influence over surgery throughout Europe, and of whom I cannot avoid particular notice.

PIERRE JOSEPH DESAULT was born February 6th, 1744, at Magny Vernois, a village near Luré (department of Haut Saonne), of a family who lived on the scanty products of a small property. Educated in a college of the Jesuits, he became proficient in mathematics, and afterwards devoted himself to the study of surgery, in the military hospital of Béfort, where he remained three years; he then proceeded to Paris, where he followed the lectures of Louis, Morand and Sabatier, in the college of surgery. Soon after, he himself commenced to teach anatomy and surgery, and had so many auditors as to arouse the envy of his rivals who wished to silence him. Though but the usher of an official master, he continued in his own line of instruction for many years. Being accused of having no aptitude for surgery, however able he might be in anatomy—with his apparatus for fracture of the clavicle, ligation of arteries after amputation (the practice of Paré fallen into disuse), his proposal to ligature the aneurismal arteries above the tumor, his appara-

tus for fracture of the neck of the humerus, and his modifications of many surgical instruments, as amputating knives, which then were curved and he desired to have straight—he dissipated the calumnious accusal thrown against him, and followed his own path. Although not yet an associate of the college of surgeons, as required, he was called to a professorship in the school of practice, where Chopart lectured, with whom he entered into a friendship which lasted through life. The generosity of Louis came in aid to the poverty of Desault, and he placed him in a position to be admitted into the college of surgeons (1776), where he defended his thesis on the gorget of Hawkins, as modified by himself. He next became a member of the Royal Academy of Surgery.

In 1782, when the cloud of the terrible revolution appeared, he was appointed surgeon in chief of the hospital La Charité, and it was then he illustrated fracture of the radius, the olecranon, the rotula, and made use of compression for varicose sores and scirrhus, modified the operations for harelip, fistula in ano, umbilical hernia, also modified and invented new processes and instruments for nasal and uterine polypi, for the latter of which Leusat had opened the way. In 1788 Desault passed from La Charité to the Hotel Dieu, always chief surgeon, and he there had a very large field for his work. He there established a *Clinique*, the first in France, and so completely did he devote himself to his art and his students, leading them to see for themselves, and to study diseases, that he made his practical exercises the most classic in Europe. "From Desault, (says Bichat his disciple) men learned a simple doctrine, touched by nature, discumbered of a farrago of useless remedies, fecundated by the genius of a great man, who was framed superior to art, and was capable of creating that which art wanted." To tell how much Desault did for surgery, would be a long discourse. There was not, it may be said, an operation then in practice which he did not try to improve, and from necessity he created many. He invented the Kiotome, the apparatus for extension and counter extension for fractures of the femur, and many other things for other fractures. The great merit of this eminent man, and of his extraordinary genius, was that of having awakened in all an enthusiasm for surgery, which he regarded as highly meritorious, and of having given life to a surgical clinique, to which the studious, from every part of Europe ran,

and from which they went forth able surgeons. During the revolution (1794) the faculty of medicine and the college of surgeons, at Paris, were fused into a single institute, called the school of health, to which Desault was called, to teach clinical surgery. But he was so much vexed by this change, and by this consortation of medicine with surgery, of which on the contrary he should have rejoiced, that falling into a taciturn and depressed state, and being struck by a cerebral affection, he died June 1st, 1795, having hardly reached his 51st year.

*D*esault was a great surgeon, passsionately fond of his art, and so zealous that though having a family, he slept in the Hotel Dieu, that he might always be prompt in his duty. If we except his thesis, he published nothing else. (?) He was rude and violent, and he often appeared uselessly unpitiful. He knew much of surgery, but little or nothing of medicine, and this was bad for the surgeons who went out from his school, as they conformed themselves to a dualism pernicious to humanity, and through imitating their master, they exhibited in their practice rather rough and and gross manners. It appeared as if a surgeon meant a person without grace, gentleness, decorum, or compassion. Even in Italy the coutre-coup of that school was felt for a long time. Such were surgeons, and surgeons only, men of large knowledge, but frequently of little refinement. Roughness and little pity appeared to be qualities necessary to the art; it was an error, an unpardonable error. If in the school of Plato the graces were represented, in hospitals pity should be represented in all her forms.

"Returning now to the history of Italian surgery, to which this article should have chief regard, and taking our departure from the beginning of the 18th century, when the doctrines of the great Galileo had begun to govern science, and had opened the road to physical truths, and prepared the foundations of true natural philosophy, I will say that many and valuable were the labors of the medical surgeons of Italy, by which surgery has been led onward to our times most honorably, no longer now despised and subjected to the tyranny of medicine, but aided and protected by her. Besides the anatomical studies which were always cultivated in Italy, and were never dismissed from her numerous and flourishing universities; besides the general treatises on surgery, which at various times appeared; besides the special illustrations of various diseases, which are

to-day called monographs, a most important study had its origin in Italy, which was the real basis of operative art, without which it must have run timidly and erringly; this was that anatomy which we now designate *topographic*, or *regional*. It has for its object the knowledge of complex parts, not only in their natural positions, but also in their reciprocal relations, as nature has placed them, so that, finding one, we may by it as a certain guide, proceed in tracing others, availing, for example, of folds and wrinkles of the skin, borders and attachments of muscles, the position and direction of blood-vessels and nerves, or the edges and prominences of bones. Surgical anatomy is also aided by the knowledge of diseases, giving the reason of their principal seats, and often of the symptoms accompanying them. Great is the benefit which operative practice and the whole of pathology, both medical and surgical, have drawn from this special anatomy, entitling it to be maintained wherever surgery is taught.

Proceedings of Medical Societies.

ST. LOUIS MEDICAL SOCIETY.

SATURDAY APRIL 24TH, 1880.

Larynx of Redemeier.

DR. PORTER — I am fortunate in being able to present a somewhat rare specimen of the larynx of the man Redemeier, who was hanged yesterday. Aside from the interest attached to the mental condition of this subject, there are some points regarding his execution, which I desire to mention. The neck was not broken, nor was there any dislocation of the vertebræ as in Nugent's case, who was hanged at the same moment, and who died almost immediately.

Redemeier, who died from strangulation, died a more lingering death. The pulse at three minutes after the fall was 130, then it sank gradually to 78, where it remained for some minutes, then fell to 36, yet it did not cease for 13 minutes in all. During this time there were several convulsions, and even afterwards muscular contractions, most marked in the left arm were noticed. As is here seen, the rope passed directly upon the larynx, crushing in the crico-thyroid membrane, and fracturing the cricoid cartilage. The points of lesion are marked by the black pin in the specimen. Within the larynx you may see the ecchymosis resulting from the pressure, both upon the vocal cords and the mucous membrane. The projection of the crico-thyroid membrane into the larynx is seen almost occluding the respiratory tract. A practical question arises here.

Is it not always desirable to break the neck of the criminal in such executions? Some resent authorities have attempted to prove that death by pressure upon the veins, arteries, nerves, and air passages of the neck is painless. It certainly cannot always be so, and it seems that this is a case in point, especially when compared with the other. A very simple addition to the present noose, such as a hollow wooden ball, slipped over the rope close to the neck, will I am sure secure fracture or dislocation of the cervical vertebræ.

After some further experiments upon the lower animals, I will ask permission to again introduce this subject to the Society.

Dr. Maughs—Why not give them chloroform?

Dr. Dickinson—It was my duty several years ago to be present at the execution of a man, and the data were very similar to those in the case of Redemeier. Life was prolonged about 17 minutes. Of course we cannot determine whether there was any pain or suffering, but nature seemed certainly to say there was. There were convulsions which continued with greater or less frequency during some 10 or 12 minutes. This criminal unquestionably died from strangulation. The vertebræ remained intact. I think statistics show that only about $\frac{1}{3}$ or less than $\frac{1}{3}$ of criminals hanged, die in consequence of fracture of the vertebral column.

Dr. Moore—As regards the manner of execution, when we look at it from a humanitarian standpoint, certainly it is our duty to make a man's exit from this world as easy possible. But the great object of executions is to repress crime, and consequently it would not be good policy to make the executions of an agreeable character, and the more repugnant they are to our feelings, the more effective they will be.

Hypothetical Cases.

Dr. Stevens—I have in may pocket the hypothetical case presented to the jury in the case of Michael Kotovsky, who was recently indicted in the Criminal Court and found guilty of murder in the first degree. I would like to read this hypothetical case to the Society. I have felt for a long time as though the medical profession has a very slight appreciation of the difficulties and embarassments under which we as experts labor in these cases. They do not attract the attention of the profession generally, and do not attract the attention of the public. The better class of society very rarely go to the Criminal Court in any considerable number, and I do not think that they and the medical profession generally understand our position. We know that there prevails a sentiment in the community, which I believe is a false one, in regard to the too frequent urging of the plea of insanity. I do not believe it is urged any too often; not that I do not believe that it has often been abused, but I believe that a great many persons are executed who are insane, and who might be proved to be insane. Then again I believe

that some of the worst criminals have been cleared on the plea of insanity. The case I wish to bring before you to-night is one in which the man has been declared guilty of the murder in the first degree, notwithstanding the plea of insanity in his case.

Hypothetical Case of M. Kotovsky. By C. W. Stevens, M. D.

Suppose that a young man, 22 years of age, is charged with the crime of murder, and at the trial the evidence established the following facts: That the grandfather on his mother's side was insane and was chained in a room to a block, and when persons looked in the window would spit at them. That the grandfather on the mother's side was of excitable, dangerous and violent temper; that he was subject to causeless outbursts of rage, at which times his whole family would have to flee before him and hide themselves; that his eyes would glare widely as though he was intoxicated, though he had not touched a drink of liquor; that although he loved his wife when at himself, would in these fits of rage attempt her life, and once tried to kill her with a hammer, and in these paroxysmal outbursts would beat and abuse her; that at one time he rushed frantically into a neigbor's house, trembling with fear, under the delusion that some one was persuing him, and he had no reason for so thinking. That he was subject to fits, and epileptic attacks at home and at church, and that on one occasion he rushed out to the barnyard and beat the cows and horses without any apparent provocation till his neighbors interfered, to control him from such abuse of dumb animals.

2d. That the *grandfather* on the mother's side was a cripple, quite deaf and had been so for many years, and was of weak and feeble body.

3d. That his uncle, the mother's brother and son of grandfather and grandmother, was regarded by those who knew him as feeble minded; and so much so that a young lady to whom he was engaged refused to marry him, because she feared he might have inherited his father's insanity and so transmit it to their offspring; and that it was the habit of this uncle to walk alone and mutter to himself.

4th. That his *aunt*, the mother's sister and daughter of grandfather and grandmother, was half witted and half crazy, and manifested her insanity in the form of profound melancholy and

habitual mental depression; that she was very deaf and her deafness, as that of her mother and sister, was not traceable to scarlet fever or similar other disease, but was *congenital*; that she stammered badly, was given to fits of melancholy, and when aroused from her meditations would become very much excited. That she was the butt and object of ridicule to the village school children, who called her "silly Josephine" or the foolish Josephine; that she imagined she had six or nine lovers, when in reality she had none at all; that she was capricious and notional; that she would rush out and into the street, pulling her hair and shaking her head and talking to herself, without any apparent cause. That she had eyes, hair and complexion like her nephew, the subject of this hypothetical case; that she would go from her home to the home of the father of the hypothetical individual in midwinter barefooted.

5th. That his own mother was quite deaf, suffered greatly and almost constantly with violent headaches, was very nervous, noise and confusion running her nearly wild; was high tempered and excitable, and on one occasion tried to commit suicide by attempting to hang herself, without having any apparent motive for the act, and that the attempt would have succeeded had not her own son cut the rope. That on another occasion she started towards the river, vowing that she would drown herself, without having any adequate motive for the act, but was overtaken and brought back by her youngest son; that she was habitually nervous, and exciting subjects were kept from her.

6th. That his full brother was born blind in one eye, and so continues up to the present date and is uninformed and unable to understand questions except when couched in simple language.

Suppose that the young man, the subject of this hypothetical case, to have had prior to his tenth year, two spells of sickness, the one being a convulsive affection, accompained by foaming at the mouth, the other a fever accompained by a violent and protracted headache.

Suppose his habits up to his 21st year to have been regular and orderly, that he was of excellent moral character, virtuous in his living, not running after women of the town; attentive to business, careful and fastidious in dress, even to vanity, cheerful in disposition and of a hopeful sanguine temperament, and a general favorite among those who knew him.

Suppose that in the fall of 1877 he was emyloyed by a farmer in the State of Illinois, but was unable to perform the simplest kind of manual labor, namely, cutting down weeds in a cabbage bed; that though he was shown how do to the work and remonstrated with and reprimanded by his employer, and threatened wtih being discharged, he was unable to perform the work and was discharged by his employer. He had malarial fever, and that afterwards when he had apparently recovered from the said attack of fever, his conduct and actions were regarded by those who worked with him and noticed his whole demeanor and walk and general appearance, as exceedingly strange; that when in walking, his gait would be quick and then slow, then suddenly quick again, and would stop and stare around.

Suppose that the said hypothetical individual came to St. Louis, and that in May, 1878, he had another attack of fever, which was intermittent or malarial in its nature, and that the attack continued through May to June, disappeared in July and August, but returned again in September. Suppose that these attacks were accompanied by severe and constant headaches and much fever, and that it was necessary to administer large quantities of quinine. Suppose that in June, 1878, he made the acquaintance of a girl, by her visiting a saloon for beer, at which saloon he was acting barkeeper. That their intercourse was very slight, and that neither knew the last or family name of the other, that he never called at her house but once, and then did not see her, and she never gave him any affront, nor recieved any from him. Suppose that in September, 1878, his friends and those most intimate with him began to notice an altered demeanor, a departure from his normal self; that he became careless and untidy in his attire, remiss in business, dejected and low spirited and talked but little, contrary to his usual habits of life. Suppose that in September 7th, (same year) he lost his mother by death and was deeply and profoundly affected by the circumstance, although he did not shed a tear. That he complained to his brothers and his employer of fever and violent headaches; that his employer felt his head, pulse, and found the man hot, feverish, with flushed face and much excited; that he said to his employer, "I am crazy; I don't know what I am doing; there is no use of my staying here any longer." That he said to his half brother, "I'll get into the insane asylum;" that his employer thought he looked and acted like a drunken man, although he did not know him to be drunk at the

time, and never knew him to drink to excess or become intoxicated. That his employer and his half brothers and his father thought he acted queerly, and was very different from his former self, and so expressed themselves. Suppose that he said to a druggist, "I am sick and tired of the world; I'll kill myself;" and on the 3d of October he left a good position, voluntarily, with no good cause, and that he was not discharged. That he staid four or five nights at his father's residence, between the 3d and 10th of October, that he was restless at nights, sleeping little if any at all, would talk in his sleep, and would strip himself entirely naked, contrary to his usual habit, and lie prostrate on the floor in early October, at a season when nights are cool and bed covering a necessity. That he would jump up and walk wildly about the room, laughing and muttering to himself and continued this way all night, on several occasions in succession, immediately prior to the homicide. That his brother, who occupied the same room with him, asked him to get up when he saw him lying naked on the floor, and asked him what he meant by carrying on so; that he replied, "I don't know; I have fever in the head." That he did not get up just then, but laid there awhile, then got up and walked around muttering and again laid down. That this took place several nights, immediately prior to the homicide. That both father and brother remarked the change in him and thought that he was not in his right mind. And even his neighbors noticed the alteration in him.

Suppose that although he had attended in person at his mother's funeral and knew of her death, yet during that week, from October 3d to October 10th, he would ask his father," Where is my mother? where is my mother?" Suppose that his regular physican, who had been treating him since the 18th of August of that same year for chancre, accompained by aching pains in the knees and legs, and that he had buboes; that he found him during the three weeks prior to the homicide hopeless and despairing about himself, watching his own symptoms, which were wholly new to him, and which he had never before seen in any one else. That he was melancholy, chagrined, mortified and depressed over his condition, thinking and saying, "I will never get well;" and in the opinion of the physician, altogether different from his natural self; a marked change in his character being from this time observed by all his acquaintances who saw and noticed him. Suppose that on the 3d of October, 1878, the young man

bought a second hand pistol; that he expressed his intention to his employer and to his brother of going to the country, but did not go; that three or four days after he bought the pistol, he again changed his mind and went to the pawnbroker's shop, where he had purchased, it and offered to sell it at a much smaller price than he paid for it. That his manner on the second visit to the pawnbroker's was such that the pawnbroker was struck with it, and thought he must be drunk, but could smell no liquor on the young man's breath, though very close to him; neither did he stagger and the only reason that caused the pawnbroker to think him drunk was his flushed face and excited manner and manifest difference between his actions and appearance then, from this to that of his former visit. Suppose that on the very day of the homicide, October 10th, 1878, he tried to make engagements to raffle the pistol off, and spoke to his brother about it, and succeeded in getting his brother to take several tickets on the raffle to sell.

Suppose that on the night of the week immediately prior to the homicide, he never went to sleep without fever in the head, and lying naked on the floor, then walking about and muttering to himself, and other symptoms above described.

Suppose that on the evening of the homicide and a few minutes before it was committed, that he said to a friend that his former employer owed him two dollars, and that he intended to get even that night; that by his demeanor and language he made the impression on his friend that he intended to do his former employer some injury. Suppose that his employer did not owe him two dollars or any other amount, having settled to the entire satisfaction of the young man when he left his employer, and they parted on good terms. Suppose that on the evening of the homicide he went to the street where the girl lived, took his seat on the steps near the house and said to a girl passing by, "Never mind, I'm waiting for somebody." Suppose in eight or ten minutes he saw two girls approaching, got up and laid his hand on the shoulder of one of them and said, "Is this you Augusta?" at the same time firing his pistol and killing her.

Suppose that he ran away, throwing the pistol aside, then turned, went deliberately and voluntarily to the Four Courts, not twenty-five minutes having elapsed before the surrender, and gave himself up to a detective, knowing him to be such, saying: "Have you got a report of the shooting of a girl on Eighth street?"

detective answered "No; was there any one shot?" He replied, "I shot one! You'll get a report in a few minutes. Shot one myself." During the time this conversation took place, his manner was so calm and collected that the detective had no idea that he had done the shooting and when he made the statement above quoted, the officer though he was either joking or drunk. Suppose he had manifested no remorse at any time for what he had done. When asked, he told them about where he had thrown the pistol and attempted no concealment of any kind.

Suppose the homicide to have been committed on a public highway, in the early hour of the evening, from 7 to 7:30 o'clock, when there were people around and in sight and in hearing of passers by. Suppose that he had no quarrel with the girl and he had never been known to make any threat of violence, or indicated by any word or act to any person whatever, any intent or purpose to harm or molest her. Granting these facts to be true as set forth and state from your own knowledge of insanity whether in your opinion he was sane and responsible at the time of the commission of the homicide.

The gist of my testimony was this: that I would expect from an ancestry of this kind, where there was epilepsy and neuroses of various kinds, to find in an individual descended from these ancestors some peculiarity of the nervous system, some taint, although I would not infer that the individual would necessarily be insane upon any such ground, but it would lead me to believe, or suspect, if the individual committed any crime such as suicide or homicide, that he did it partially under the influence of a tainted organization. That I would infer at once with regard to such an individual.

Now whether he was insane or not would be another question. We know epilepsy is a form of disease, in which the peculiarities of nervous organization, and the neuroses of various kinds are transmitted, and are more efficient, more powerfully manifested in the progeny, than from any other cause. The strange actions of this man at the time of the murder, the lack of provocation, etc., would go to excite the suspicion that something was wrong; that he went out with the purpose of killing some one, and if he had not killed that girl, he would have killed some one else. I believe that he was insane and irresponsible at the time of the commission of the murder.

DR. HUGHES—I did not hear that hypothetical case read, but I heard it read in court. This hypothetical case differed very little, not essentially, from that presented on the previous trial of the boy when the jury failed to agree. When that hypothetical case was submitted, being unable to find any adequate motive, either in marked jealousy or other cause, and considering the ancestral history of pronounced neurotic taint—as shown in the well marked insanity, epilepsia and other nervous disease, and the congenital defect of his brother, and his own mentally inferior organism, I had no hesitancy in concluding that if all the facts were true as set forth in that hypothetical case, that the act of homicide was the offspring of a disordered state of mind dependent upon a diseased condition of the brain. I could see no other adequate explanation for the act. There was no one of whom this young man was jealous, and the jealous man usually slays the man who stands between him and the object of his affection. The man who desires the destruction of another, in order to secure the gratification of love, is not in his sane moments most likely to destroy the object of his affection. But this subject is stale to me, and I do not suppose it would interest the Society to discuss in detail the various steps by which I arrived at the conclusion that this young man was insane. I prefer to remark on the absurdity and insufficiency of the hypothetical case. In trials where the question of insanity is presented to medical experts, it is usually submitted in the form of a hypothetical case. This erroneous method of determining the existence of disease called forth years ago, from that Corypheus in forensic psychiatry, Dr. Isaac Ray, of Philadelphia, in his "Medical Jurisprudence of Insanity," an earnest protest. Where the life of an individual is involved, and the question as to his sanity and responsibility is raised, the idea of calling upon medical men to pass upon the existence or non-existence of so grave a disease as insanity, without a personal examination, seems to me so absurd as to make the proceeding appear like a travesty on justice. We are called upon, in these "courts of justice," not to prescribe a course of treatment, but to make a medical diagnosis, upon an array of suppositions framed for our consideration by a body of men not acknowledged to be familiar with the symptomatology of the disease. When one of these astute attorneys has succeeded in putting together an array of facts which usually establishes various heterogenous forms of mental

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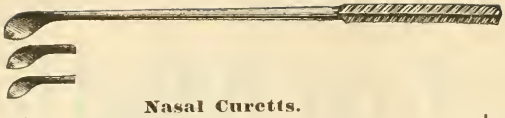

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aberration, many phases of which are incompatible, the opposing attorney is permitted also to present another array of suppositions, and these are called hypothetical cases.

The medical expert is summoned—not to testify as to the real case before him, not to tell what he knows of this individual's pulse, his temperature, his secretions, his ability to sleep and eat—not to testify as to any fact that has fallen under his observation, but to give his opinion upon a supposititious case—a case which may or may not prove to be on trial.

That is not all. When you have given your opinion upon that supposition, perhaps before you leave the stand, another supposition is offered to you, and you are to give your opinion upon that, and it not unfrequently happens that a conscientious medical man will be made to testify on both sides in the same breath. I did that the other day. I found no insanity in the hypothetical case presented in the Redemier trial, and which has been read in your hearing. But the hypothetical case presented by the Kotovsky attorney did not represent the case even fairly. There was no insanity in that hypothetical case, and no conscientious man could have said so, while the hypothesis of defence described an undoubtedly insane man.

The consequence in such cases often is, that when a man is on trial for his life, and the question of sanity or insanity is raised and passed upon in this manner, the man fails to get a fair show, and his life depends upon his luck in securing the best attorney to plead his cause. Now, how frequently has it happened in these hypothetical cases that even where both attorneys agreed to a hypothetical case, that the individual has upon one trial been pronounced insane by a majority of the jury, and upon another trial his sanity has been established. Here is a case which upon the first trial such grave doubts were entertained in regard to the man's sanity that the jury failed to agree and another jury with unanimity found that there was no insanity in it. In the case of Anton Holen, which was tried in that same court a few years ago, the question of insanity was raised, the jury found no evidences of insanity, the Supreme Court, in passing upon an application for a new trial, granted a new trial because he failed to get a jury in the proper sequence in which they were drawn, and the second trial was sufficient to satisfy the next jury with the same array of facts of his insanity.

In the case of Connelly, for killing the woman who served

him his bread at meals, under the impression that she poisoned him, and was declared insane, his sentence was commuted, and he was sent to the penitentiary. There he took up the same delusion in regard to the man who served him bread at meals, and one day stabbed him. I pronounced that man insane; every physician in the case except one other beside myself said he was sane, and the warden believed him sane. I told the Governor I would stake my reputation on the man's insanity. A commission was appointed, and they declared the man insane. The man went to the State Asylum at Fulton, and haunted by the same delusion, persecuted by the same impression that they were seeking to take his life by poison, he felt that life was intolerable, and he there strangled himself with some old broom wire. These hypothetical cases are absurd. No satisfactory diagnosis can, as a rule, be made from them. Only the professional observation of medical facts is reliable, and the law is at fault in this regard. If there is a reasonable suspicion that a man is insane and irresponsible for any crime for which he may be arraigned before the courts of his country, he is entitled to have the fact of his disease established.

Every one of these men who have been hung where there was a doubt as to their sanity have been wronged, and there has been more than one judicial murder in this free land of ours because of this fault on the part of the law.

DR. DUDLEY — I would like to ask Dr. Stevens the difference between the hopothetical case presented by the prosecution and the defence?

DR. STEVENS—The hypothetical case presented on the part of the State by Col. Normille, was a very short one indeed. He said, suppose that this man did not have epileptic fits. Suppose that his grandfather did not have epileptic fits, and then suppose the fact of the murder, and the manner in which it was done. Still there was no hypothetical case presented on the part of the State; there were some items that might give rise to the idea of insanity, but they were not of such weight as to evince the fact of the insanity of the individual, and so I testified. There were not facts enough to justify a diagnosis of insanity.

DR. DUDLEY—I would like to hear what information he himself gained with reference to the truth or falsity of the state-

ments that were embraced in the hypothetical case for the defence, during his visits to the jail.

Dr. Stevens—My visits to Mr. Kotovsky in the jail have not been with reference to determining all about his case, but from the conversations I have had with his brother, my personal examinations, and my hearing a good deal of the testimony, I came to the conclusion that he was insane, aside from the facts presented in the hypothetical case. He is a weak minded man; I think the family are all so.

Dr. Hughes—The manner in which this hypothetical case and prosecution was presented was in this way: Suppose that these fits were not testified to have been epileptic fits, but that it was only testified that the patient fell down and frothed at the mouth, and was unconscious and nothing more—upon that the attorney for the defence founded a series of interrogatories as to what those fits were. Of course, the boy observing them might have mistaken them for somthing else, but it was something grave, otherwise the patient would not have fallen—either epilepsy or apoplexy or epileptic hysteria.

Dr. Dudley—Did you visit the patient in jail?

Dr. Hughes—No, I never did; that is the protest which I make against the proceeding of the law, which requires the physician to pass upon the sanity or insanity of a person where the question employed is involved without ever being permitted to feel the patient's pulse.

Regardless of the common procedure of medical practice, the law institutes in its wisdom, a method of procedure by which medical men are expected to make a diagnosis, under circumstances that almost render it impossible, and send a man to jail if he declines to swear whether he knows what is the matter with the patient.

Dr. Johnston—Dr. Hughes has certainly argued the question forcibly and intelligently. But he only argues one side of the question. It is true the hypothetical case presented by the lawyers may not touch the real case at all. I know the ingenuity of the lawyers in framing these hypothetical cases, so as to make them fit their own side of the question. But it is not difficult for Dr. Hughes or Dr. Stevens to state their opinion as regards to this *hypothetical* case, nor is it their *fault* if the jury unjustly

judge of the real case, from the opinion rendered on the hypothetical case. But with all its defects, it will be a dangerous thing, Mr. President, to abolish our jury system.

DR. HUGHES—I do not seek to make an argument against the jury system. My argument was against the hypothetical case framed by non-professional men.

Dr. JOHNSTON—Some men, it is true, have committed great crimes against society, and who have been insane at the time of the commission of these deeds, but is it not better that a man who is insane should occasionally be hung, than that the law should be made impotent by the abuse of the plea of insanity?

Four Cases of Sunstroke Treated by Purgative Doses of Calomel and Ipecac. By G. Hurt, M. D.

As the summer approaches, it has occurred to me that a report of the following cases might present some points of interest:

CASE I.—Thos. R., colored, æt. 45, while engaged at work on the levee, Aug. 27th, 1872, complained in the afternoon of pain in his head, but continued at his work.

When called from labor at 6 P. M., he sank down and soon became unconscious and was carried to his home on Orange street.

When I saw him, an hour or two later, he was still unconsious and could only be partially aroused by shaking and loud calling. I was surprised to find the surface of his head and chest rather cool, and that of his extremities quite cold. His pulse slow and languid, breathing only partially disturbed.

These conditions contraindicated the popular treatment by ice, and left the question of treatment to be solved by something else. As I had previously known the patient to be of a constipated habit, the idea that hepatic or renal congestion, or inactivity might be the source of blood poisoning and consequent nerve depression suggested itself, and it at once occurred to me that a brisk cholagogue purgative would strike most directly at the cause of the functionial disturbance. I therefore ordered him twenty grains of calomel and two grains of pulverized ipecac to be taken at once. When I saw him next morning he was quite rational. He had remained unconscious till about four o'clock in the morning, at which time he awoke out of his leth-

argy, and began to complain of pains in his abdomen, which were soon followed by copious stools. He recovered without further treatment.

The result in this case suggested the thought that purgatives might prove equally efficacious in cases attended with great exaltation of surface temperature. I resolved to try them.

Case II.—Just one week later a saloon keeper, on Second street, near Christy Ave., about 30 years of age, after closing his saloon preparatory to retiring near midnight, fell at the foot of the stairway leading to his room on the second floor. When I saw him, half an hour later, he was in a complete state of coma. As he was entirely unconscious, I could learn nothing of the condition of his secretory and excretory functions.

His skin, especially over the head, chest and abdomen was dry and hot; face flushed; pulse full and rather frequent; respiration a little hurried and embarrassed, apparently by an accumulation of mucus in the large bronchi. The head and chest were directed to be covered with ice, the same to be continued as long as the skin remained hot.

A scruple of calomel and four grains of ipecac were prescribed to be given at once. When I saw him about nine o'clock the next morning, he was quite rational, consciousness having returned about four hours after taking the medicine. The bowels had acted freely, his fever was gone, and I had no further occasion to visit him.

Case III.—In the summer of 1874, A. S., a stout German, about sixty years of age, a journeyman tailor by occupation, and much addicted to beer, occupied rooms on the corner of Fourth and Morgan streets. One afternoon near the close of the heated term, he complained of pain and dizziness in his head, with a sense of fullness and oppression about the chest, and soon after he sank down on his work-bench unconscious.

When I saw him a few minutes later he had been lifted onto a bed where he lay breathing heavily; pulse frequent, but neither full nor strong for one apparently so full of blood; skin dry and hot, and by its color indicated stagnation in the venous capillaries. I had him removed from the feather bed on which he was lying and placed upon a mattress, and directed ice to be applied freely to his head and chest. Two hours later he was still uncon-

scious. The skin over his head and chest, though wet and smoking with the melting of the ice, was still hot.

I then ordered twenty grains of calomel and four of ipecac, which he got about four o'clock in the afternoon, and I saw him again at 10 in the evening. His temperature had by this time abated a little, and there were evidences of returning consciousness. He complained of some nausea and pains in his belly. At 8 o'clock the following morning I found him quite rational, his temperature and pulse nearly normal. The bowels had acted freely during the night and he only complained of weakness. Some attention to diet and rest were enjoined, but there was no further need of medicine.

CASE IV.—In the summer of 1875, while I was in charge at the City Hospital, a patient, a German about 40 years old, under medium height, thick set, but not corpulent, was admitted on a sultry day at about noon in a state of complete coma, breathing heavily, skin dry and hot, pulse accelerated, full and hard. He was placed on a hard mattress under an open window, ice applied to his head and chest, and twenty grains of calomel with four of ipecac ordered to be given him immediately.

Between four and five o'clock in the afternoon there was free action of the bowels with immediate subsidence of the fever and a return of consciousness. No further treatment was required.

Now as those who practice medicine are supposed to have a reason for what they do, and as the rationale for all therapeutics must be sought in the conditions which they are intended to relieve, let us inquire briefly what the conditions are that we may reasonably assume to be present in sunstroke.

The history of the outset and course of this disease is so familiar to medical men, that it is scarcely necessary to notice it here, except as supplying links in the chain connecting cause with effect. Suffice it to say that after a sense of fullness or pain in the head, for a time the patient is seized with vertigo or blindness, or both, falls down and soon becomes unconscious or partially so. If he is full habited and plethoric, and the vital energies not too profoundly obtunded, the temperature of the head and chest, and perhaps of the whole body, is greatly exalted, the skin is dry and hot, pulse full, strong and accelerated and the breathing heavy, as it usually is in a state of coma. But if the vital energies are a little more profoundly de-

pressed, there may be an unequal distribution of the surface temperature, and while the head, chest and abdomen are hot, the extremities are cool or cold. If there be a still more complete obtunding of the vital forces, the entire surface may be below the normal temperature and covered with a cold clammy sweat; the patient is from the very outset in a complete state of collapse.

Now the history of the subsequent progress and termination of the first two classes of cases above noted, is either to gradual reaction and recovery, or they will pass into the third, which usually terminates fatally.

Now the ostensible exciting cause of these conditions is solar heat, but it is obvious that it can only produce them by disturbing the physiological conditions of the blood and tissues, and until these disturbances within are produced, the system will not succumb. But in what do these physiological disturbances which constitute the pathology of sunstroke consist?

Experience teaches that excessive atmospheric heat interferes with the due performance of the respiratory function.

An atmosphere highly attenuated by heat does not eliminate carbonic acid gas from the system with sufficient rapidity, either from the simple fact of its attenuations, or from the fact that it contains a larger proportionate percentage of carbonic acid, as it usually does, also, of aqueous vapor. It impedes the absorption of oxygen into the blood and consequently there is an accumulation of carbonaceous matters in the latter fluid acting injuriously upon both the nervous and muscular tissues. Or possibly the too rapid elimination of water from the blood through the skin, under the influence of atmospheric heat and attenuation, by lessening the quantity thrown out by the kidneys, serves to promote the relation and accumulation of urea and uric acid in the system to act as a powerful sedative poison, which I suspect was one of the conditions in case No. I of this series.

Now if we may be allowed to assume that these are possible and probable conditions of the blood in sunstroke, we shall, I think, have no difficulty in explaining the rationale of the treatment which combined in all the cases, except the first, the heat absorbing influence of cold, with such other remedies as were calculated to act most promptly in depurating the blood by eliminating from it the offending matters. And though it may be contended that in cases of uræmic poisoning, neither calomel nor

ipecac can be considered appropriate, experience has taught and we have the highest medical authority for saying that where grave head symptoms supervene on interruption of the renal secretion, no remedy brings relief so promptly as purgatives, and of this class no remedy acts more efficiently than calomel when given in sufficient doses suitably combined.

But I do not wish to be understood by what I have here written, that I propose to confine myself to any particular routine in this or any other disease, believing that the proper time and place for determining what to do in any case, is at the bedside. And if I fail to convince my professional brethren of the rationale of the treatment of these cases, I shall at least have convinced them of the fact, that some cases of sunstroke will recover without any treatment at all, or even in spite of bad treatment.

ILLINOIS STATE MEDICAL SOCIETY.

THIRTY-SECOND ANNUAL SESSION OF THE ILLINOIS STATE MEDICAL SOCIETY, HELD IN THE ACADEMY OF MUSIC, AT BELLEVILLE, ILL., MAY 18TH, 19TH AND 20TH, 1880.

TUESDAY—MORNING SESSION.

Dr. J. H. Rauch, Sec't'y. of the State Board of Health, acting as temporary Chairman, called the meeting to order. Then Rev. F. W. Van Treese offered a prayer and was followed by Dr. W. West, of Belleville, who made an address of welcome on behalf of the local society.

Mr. G. W. Jones, of Danville, the First Vice President, then took the chair and the business of organizing commenced. The committee on arrangements made a report which was accepted.

The resignation of Dr. N. S Davis, of Chicago, the Permanent Secretary, was read and accepted, and Dr. S. J. Jones, of Chicago, was elected to fill that place.

A number of letters from absent members were read, and then the Publication Committee made a report which was accepted.

After some more business of an unimportant nature had been transacted, the meeting was adjourned to 1:30 P. M.

AFTERNOON SESSION.

The President Dr. E. Ingalls, of Chicago, having arrived, made his address, which was quite interesting.

The Committee on Practical Medicine made its report. Dr. B. F. Crummer, of Warren, read a paper on pneumonia and diphtheria in the Northwestern part of the State, the first part of which was written by Dr. Caldwell. This paper was discussed at some length.

The Committee on Surgery, represented by Dr. Hill, of Bloomington, made a report in which antiseptic surgery and various other subjects were reviewed. The gentleman also read an account of two cases furnished by Dr. Cole, of El Paso.

Dr. J. G. Harvey, another member of this committee, read a paper on a case of extirpation of the parotid gland, and another on an unusual case of hernia. These papers were discussed at some length also.

WEDNESDAY—MORNING SESSION.

Telegrams from the Missouri and Indiana State Medical Societies were received and read. They expressed their good will and fraternal regard, and a committee was appointed to respond appropriately to them.

Dr. L. R. Williams *alias* Lucas, of Chicago, a permanent member, was expelled for violation of ethics in circulating handbills under a name not his own, and claiming to perform marvelous cures.

The report of the Committee on Obstetrics next came in order. Dr. G. W. Nesbitt of Sycamore, read a paper on malformations in fœtus due to the influence on the maternal imagination. Dr. Herriott the other member of this Committee, had his paper referred to a later date.

The report of the Committee on Ophthalmology and Otology was made by Dr. Montgomery, of Chicago, who read a paper on suppurative inflammation of the middle ear, and one on double optic neuritis caused by a violent fit of anger. An interesting discussion followed.

Dr. Frank Davis, of Chicago, read a volunteer paper on inhalation as applied to the deeper portion of the respiratory tract.

This paper was also discussed. The society then adjourned till 1:30 P. M.

AFTERNOON SESSION.

On re-assembling, the report of the Committee on Nominations was read and adopted, and is as follows:

President—Dr. Geo. Wheeler Jones, Danville.

1st Vice President—Dr. Wm. Hill, Bloomington.

2d Vice President—Dr. D. W. Nesbitt, Sycamore.

Permanent Secretary—Dr. T. J. Jones, Chicago.

Assistant Secretary—Dr. W. T. Montgomery, Chicago.

Treasurer—Dr. J. H. Hollister, Chicago.

Chicago was selected as the next place of meeting.

The Committee on Gynæcology made a report. Dr. Laura H. Carr of Carlinville, read a paper on neurasthenia as such, and as a remote symptom of uterine disease. A short discussion followed.

Dr. J. H. Rauch read a paper, showing some of the work done by the State Board of Health.

Dr. Patrick, of Belleville, read a volunteer paper on medical specialties.

Dr. H. Z. Gill, of Jerseyville, read a special report on the indentity or non-identity of membranous croup and diphtheria.

The Jersey County Medical Society, which had charges of irregularity preferred against it, was re-instated and the charges dismissed.

The Committee on Necrology reported progress.

Dr. E. Ingalls, of Chicago, read a short notice of Prof. Thos. Bevin, deceased.

Dr. Herriott, of Grafton, a member of the Committee on Obstetrics, read a paper on anæsthetics in labor. An interesting discussion followed.

Dr. Lee of Chicago, read a volunteer paper on Tracheotomy. This was discussed at some length.

A letter from the St. Clair County Section of the National Women's Christian Temperance Union was received, asking the Society to discuss the subject of temperance, and to embody the result in a resolution. A committee to which it was referred made a non-committal statement, and the matter was further re-

ferred to a committee to report at length at the next annual meeting.

A resolution was adopted to allow members to publish their communications to the society in journals.

THURSDAY—MORNING SESSION.

Dr. Nesbitt, of Sycamore, was appoited a committee to memorialize the Legislature to appoint a State Board of Hygiene, with special reference to schools and school houses. Also another bill to do away with trial by jury in cases of insanity.

Dr. Lee, of Chicago, read in behalf of himself, and Dr. Fenger, of Chicago, a paper on tuberculosis of joints with excision. Successful cases. Two of the patients operated upon were presented.

After this the delegates to the various neighboring State Societies, and to the American Medical Association were appointed, and the Society, after passing a number of resolutions of thanks, adjourned to meet in Chicago on the third Tuesday of May, 1881.

The following St. Louis physicians were noticed in attendance; Drs. Ed. Borck, P. H. Cronin, Wm. Dickinson, C. H. Hughes, I. N. Love, J. H. McEntyre, E. M. Nelson, A. H. Ohmann-Dumesnil, Wm. Porter and T. F. Rumbold.

The meeting on the whole was pronounced to have been one of the best attended, and most interesting that had been held for a number of years.

The address of Judge Snyder on behalf of the citizens of Belleville, Prof. Hodgen's lecture on "Formation of Character," and Prof. Jewell's lecture on "Hygiene," were ordered to be printed in the transactions of the Society.

PRESIDENT INGALL'S ADDRESS.

He expressed himself sensible to the honor conferred upon him of presiding over the meeting. There was cause of rejoicing in a re-union which permitted us to cement the bonds of friendship and to do great good. He did not expect to say anything novel, but hoped it would be useful. He proposed to speak on the rights and duties of government and medical societies in regard to sanitary measures. The physician is the natural teacher of the people on sanitary subjects, and should instruct them to the best of his ability. Every severe case of sick-

ness should cause him to inqnire into the unsanitary relations of the patient. It is perhaps better to prevent disease than to cure it. If greater emphasis was laid on hygiene in our medical schools they would produce better pupils.

Homer expressed the opinion of the most enlightened people of his time when he sang of Jove's ire filling Hades with the shades of warriors. People of most enlightened nations still offer prayers to avert pestilence, and savages offer sacrifices for the same purpose.

The discovery of the efficacy of vaccination gave a great impetus to preventative measures. Great rewards have been secured from these efforts, but even now the work has been only commenced. I believe one-half of disease could be avoided.

The cause of disease being so widespread may be ascribed to ignorance and apathy. Ignorance is the greatest curse under which we labor. Could we only breathe pure air, drink pure water, eat pure food, think pure thoughts, a good many doctors would be forced to look to other employments.

Only a few points on this subject can be touched. Of these four cardinal sources of health, the fourth can be left to our clerical friends. In regard to food it is necessary that the authorities should examine into its adulteration. In regard to water and air the subject is more important. When we consider that one-sixth of the population of Illinois is in one city it becomes important. The sewage in cities is chiefly contained in water, in solution, and when properly aerated it becomes inocuous; hence unlimited water should be used. Chicago is fortunate in having but to pump it. The sewers in great part empty into the Chicago river, which is without current, and a part of them go to the lake. There is a better way to dispose of the sewage. Let the Illinois and Michigan canal be enlarged and so convey the debris to the Father of Waters, and by it to the Gulf of Mexico. The future of Chicago is great. It is but in its infancy yet, and in the gristle of its childhood. A very populous city will yet be built on the site it now occupies. When such a canal is built it will unite it to 2,000 miles of streams emptying in the Gulf of Mexico, and its lake commerce will be added to this. The expense of such an undertaking is a mere trifle when compared to the advantages that would be obtained. Liberal expenditures in this direction are a wise economy, as nothing is more deleterious than sickness. Our lakes are remarkable bod-

ies of water, having but few tributaries and but one outlet. It is fortunate that they are not surrounded by high inclosures, and hence are purified by the action of the sun and air.

Dr. Chas. Smart, of the National Board of Health, in speaking of the water supply of Memphis, says that of nineteen wells examined fourteen contain sewage matter. It is not strange that Memphis had an epidemic of yellow fever, thus laying an embargo on the commerce and health of its inhabitants. Had money been judiciously applied to render it sanitary, it would have cost much less than it has already done. The death rate in Memphis is 37,3 per 1,000, nearly one-half in excess of other cities. However, efforts are being made to improve its sanitary condition.

The dangers in cities arise from the non-ventilation of sewers and from deficiency in the air space and air supply of houses. In some cases it is due to the ignorance of the builder, and in others to criminal neglect. Catch basins should never be placed beneath houses, as they let out deleterious gases. Set bowls in houses should be carefully trapped with tubes, allowing the gases to escape above the roof of the house. The free ventilation of all sewers in houses and in streets is of the greatest importance. The best ventilation is a good chimney fire, and unfortunately now very few of our modern rooms are so heated. The Indian with a central fire in his tent could give many of his civilized brethren a hygienic lesson by which they might profit. High ventilation may be accomplished by window opening at the top, and if but one of either high or low ventilation can be obtained the former is preferable. With such surroundings an invalid need not go abroad.

Our schools and public buildings are all filled with death-bearing air, owing to improper ventilation. To commit suicide is criminal, but to undergo the dangers which common prudence might avert, is akin to suicide. A house with modern improvements is a complex machine, tending to produce death. Here simplicity is the best. We should spare no efforts to make our homes happy, healthful and pleasant. We should endeavor to render pure, air which has been contaminated by the sick, especially by contagious diseases, such as small-pox, yellow-fever, cholera, scarlatina, and perhaps syphilis, and government should render its aid here. None need have small-pox unless they so desire. All hold it to be the duty of the government to protect

its citizens from ignoraece, accidents, crimos, etc, and why not then from pestilence? It is no violation of liberty to prevent an individual from spreading disease.

It was the profession that first asked for a law enforcing the announcement of births and contagious diseases in this State. On this account physicians should not object to it because of the absence of pecuniary compensation for such services. They ought to consider that if this involves a little trouble that, on the other hand, physicians are exempt from jury duty, and are granted many privileges.

The President concluded his address by suggesting that members of the Society be granted greater latitude in regard to their papers. If allowed to have them reprinted in journals before or after they were printed in the transactions, it would tend to make the Society better known, and many more copies of the transactions might be disposed of. He however wished all to remember that the profession must enlighten the people on hygienic laws, and insist upon seeing them fulfilled.

REPORT OF COMMITTEE ON PRACTICAL MEDICINE.

Dr. Caldwell, of Warren, had a paper on pneumonia and diphtheria in the Northwestern part of the State, read by Dr. Crummer, of Warren.

Pneumonia—Treats it by giving a mercurial cathartic to start with, and then salicylate of soda. Veratrum viride and aconite to some extent; also Dover's powder. In sthenic cases bleeds, and in pleurisy. Uses sometimes a jacket. Gives digitalis for feeble and irregular action of heart. Gives milk freely and does not care to move the bowels after the first cathartic.

Believes a lasting debt of gratitude due to Prof. Flint for showing its self-limitation. Twenty-five years ago, at the beginning of the writer's career, blood letting was pushed to a great degree in pleuro-pneumonia. The antimonial method followed, and after that Dr. Norwood's use of veratrum was the established manner of treatment. Few now administer it to the extent that he advocated. On reviewing the subject the writer found that as each method was about equally successful and as many were directly opposed, they must be equally worthless. During the past year he had two fatal cases of single pneumonia. In each the pulse was feeble at the outset. He thought this was the case in all cases of single pneumonia that proved fatal and

no doubt dependent upon some heart lesion. Hence, on this account, he has entirely discarded arterial sedatives in treatment. During observations made by him in hospitals in Vienna and Berlin, he never saw them used. But he did see the cases of pneumonia favorably treated by the use of wet sheets to the abdomen and chest.

He had a case of double pneumonia in an old man. He ordered quinine and digitalis, hot water to the feet and cold sheets (60° F.) to the chest, keeping the temperature down to 102° F. In 36 hours he was on the high way to recovery. This treatment is most important in children. Had a case of a child five years old, with a pulse varying from 140 to 150; perspiration 40 and temperature 105° F. Ordered cold applications, digitalis and quinine, the digitalis in small doses to give its stimulant action.

In regard to diphtheria was not satisfied as to whether it was of local or general origin. The local trouble in the throat, however, is in direct ratio to the severity of the case. The exception to this is in diphtheritic croup where cases are fatal and there is but a small exudation. Prior to 1860 diphtheria was unknown in this section, although many cases of membranous croup had been seen.

SUB-REPORT FROM JOE DAVIESS COUNTY, BY DR. CRUMMER, OF WARREN.

The year 1879 and the first quarter of 1880 show a great increase in diseases, especially pneumonia and diphtheria. There has been there localized epidemics of diphtheria, that could be easily traced to their source.

Mrs. B—— brought her boy, seven years old, from a diphtheria infected district, and in four days he had diphtheria well developed. Within a fortnight she received the assurance from her physician that she and her boy might visit without danger to others. By this means she infected eight cases of which six recovered and two died.

A minister had several children, suffering from diphtheria, and they recovered. In the meantime some families visited the minister and all were attacked. There were in all twenty-six cases with seven deaths.

In Rush township the people did not believe in its contagiousness. Two children went away from home for some time

and came back and returned to school. In a short time the whole school was infected, there being fifty-eight cases, attended with seventeen deaths. The families furnishing the greatest mortality were those living in badly ventilated houses and having not enough regard to cleanliness. The author thought that isolation should be prompt and thorough in pratice. We may enforce it readily, and if we do this we may not only prevent the spread of the diseases but also enhance the chances of recovery; had little to say on the treatment and no specific to offer. Early treatment has a great bearing in the matter. Had noticed nasal complications in many cases, generally the worst types; also glandular enlargements and albuminuria almost a constant factor. He thought that disinfectants should be firmly used, locally and generally. The most efficient medicine to remove the exudates, in his opinion, is tannic acid. For the nasal complications salicylate of soda or carbolic acid solution injected. As to internal remedies iron, quinia, potassium chlorate. Has found bromide very good when given according to Thompson's formula:

℞. Bromine.....ʒ j.
Potassii Bromid.....ʒ ij.
Aqua ad.....ʒ iv.
M. F. Sol.
Sig. Two drops in sweetened water at a dose.

It is superior to benzoate of soda or to the sulphites or sulpho-carbolates. Would not hesitate to perform tracheotomy in cases of diphtheria when indication existed.

As regards pneumonia, there have been many cases, but as a rule these were mild in character. He endeavored to gather methods of treatment. One physician uses saline cathartics, Dover's powder and massive doses of quinia, and perhaps carbonate of ammonia. Later on compound tincture of bark, and then turpentine by inhalation and alcoholic stimulants.

Another in infantile or lobular pneumonia never uses veratrum viride. He uses turpentine and digitalis, and blisters in the stage of resorption. His mortality is light.

Another who has a five per cent. death rate uses no blisters whatever. Still another does blisters.

The author had 25 cases last year, these being distributed as follows: Under five years, 7; over five and under ten, 5; over ten and under twenty, 4; over twenty and under fifty, 3; over

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JOHNSTON'S FLUID BEEF,

A Concentrated Preparation for Nutritious Beef Tea or Soup, containing the entire azotized constituents of the Beef.

THE MOST PERFECT FOOD FOR INVALIDS EVER INTRODUCED.

Specially Recommended by the Medical Faculty.

The efficacy of "Liebig's Extract of Meat" as a harmless stimulant is everywhere acknowledged, but, outside medical or scientific circles, it is not generally known that all extracts of Beef, including home-made beef tea, are simply flavor of meat, (technically, the soluble salts of flesh,) and ARE NOT IN ANY REAL SENSE NUTRITIOUS, the process of preparation necessitating the entire exclusion of the insoluble or nutritious constituents of the Beef.

The medical profession has long realized this vital imperfection in all extracts of meat, and desiderated a food for invalids which shall combine the stimulative and nutritious properties of Beef, and be at once palatable and easily digestible. THIS PREPARATION CLAIMS TO MEET THE WANT. It has been submitted to the most searching chemical analysis by the leading analysts of Great Britain, and has been adopted in their practice by the highest medical authorities, all being as one in their appreciation of its substantial merits. It is now offered to the notice of the medical faculty of this country and to the general public, with full confidence that it has but to be known to be popularly accepted.

To obtain a perfect Beef Tea, it is essential that the albumen and fibrine (which are the flesh-forming or nutritious qualities of meat) shall be added to the extractive or stimulative qualities, and that these shall be present in a form admitting of easy digestion by the most capricious and irritable stomach. This is the theory which led to the preparation of "JOHNSTON'S FLUID BEEF" (the only meat extract which fulfills all the conditions of a perfect food.

Dr. Nichols, (31 Spruce street, Philadelphia, says: "I have used it in a case of a child suffering from extreme debility after an attack of cholera infantum; the child began to improve immediately, and is still taking the Fluid Beef. I find it very palatable and nourishing, easily digested, and am satisfied that the contained fibrine is perfectly assimilated by the tissues of the body, as shown by a great gain of strength, etc. I feel assured it will meet with general favor."

Dr. Malcom Macfarlane, 1805 Chestnut street, says: "It is with unusual pleasure and confidence that I give my recommendation to Johnston's Fluid Beef. It is in the best form and the best preparation with which I am acquainted or have used."

JOHNSTON'S FLUID BEEF is now extensively used in British and Continental Institutions, Hospitals and Asylums, and is prescribed by the medical faculty wherever it has been introduced.

Its adaptability is general to the invalid, the convalescent and the vigorous. To children it secures a strong muscular development, and for maternal nursing, imperfect mastication, athletic training, physical exhaustion, indigestion or mental overstrain, it is the perfection of known food.

DIRECTIONS FOR USE. Add a small teaspoonful to a cup of boiling water, and season to taste: or as a sandwich paste it may be used on toast, with or without butter. The can may remain open for weeks without detriment to the contents.

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RICHARDSON & CO., Wholesale Agents, St. Louis.

Pills:—Physicians practising in the Southern and Western States, are usually careful to designate Warner & Co.'s Soluble Sugar-Coated Pills when writing prescriptions, as they have derived the most beneficial and uniform results from the use of these preparations. It would be well for physicians everywhere, to exercise this same caution when prescribing Pills of Quinia and Phosphorus, as well as all other kinds, to avoid inferior brands at lower prices.

Sugar-Coated Pills skilfully prepared of pure material, possess advantages over those coated with other material. Sugar is the most soluble, and, when necessary is applied to pills so soft as not to retain their form uncoated. They are beautiful in appearance, more acceptable to the patient, more readily swallowed than pills with sticky coating. Doctors who had favored other pills on account of their much vaunted merit for solubility, write us that their delicate patients revolt at their color and appearance. Physicians throughout the country have it in their power to disprove their claim for greater solubility, as samples of "soluble" gelatine-coated pills in small paper boxes have been extensively distributed, which after being kept for a time become very hard and brittle, the enclosed mass, as well as the coating, losing its moisture. This proves that gelatine is not nonpervious and is certainly not the proper material with which to protect medicinal substances, especially Phosphorus in pilular form. Warner & Co.'s should be used and invariably specified when ordering.—W, & Co.

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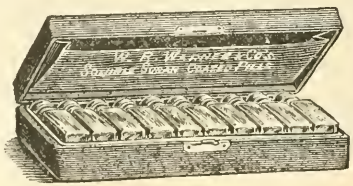

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☞COMPLETE LISTS SENT TO ANY ADDRESS.☜

fifty and under seventy-four, 6; total, 25. Most of these cases were mild. The most troublesome symptoms were high temperature and weak heart's action. Did not give veratrum; did not blister or bleed. Favors a supporting and stimulating plan of treatment; alcoholic stimulants are the best, and should be given directly under the care of the physician and carefully watched, as the danger is not to give too much, but rather too little. In no other disease, hardly, is so much careful attention necessary as in pneumonia, at the critical stages, especially. Did not think carbonate of ammonia could be substituted for alcohol, as it is only a transient stimulant.

Scarlatina and measles are not known in Jo Daviess County. Malaria was greater in the fall of 1879 than for many years previously. Sulphate of quinine still gives the best results. In dilute hydrobromic acid we have a good solvent, which at the same time prevents the bad influence of quinine on the cerebral circulation.

SUB-REPORT ON PAROTITIS BY DR. F. B. HALLER, OF VANDALIA.

During 1879 scarcely a child or adult in his section of country escaped, and there was no family, some of whose members were not attacked. Among the adult males there was metastasis to the testicles as a rule. In females also there was some. In young boys there was a metastasis to the brain. There were some very grave cases, in which the temperature rose to 105° F.; pulse very rapid; tongue dry, soon becoming brown and cracked; breath very fœtid; pain and swelling in testicles simultaneous with that in parotid. It was not unusual for both testes to be affected.

Looking over the literature of mumps, this epidemic must have been a severe one. According to some authors this disease is regarded as a light affection, and local determination is a favorable omen. Do not agree with them. The mild cases were those having only the glands of the neck involved; the worst in which both the testes and the parotids were involved. The metastasis to the testes was not favorable and often destroyed one.

The treatment was cathartic. Gave a saline cathartic, warm applications to the neck and injunctions to remain indoors. Gave gelseminum, aconite, veratrum, tonics, stimulants, in the severer forms. Where metastasis took place ordered mustard to the parotid and flaxseed to the testes till resolution took place.

When the brain was affected counter-irritation to the spine, etc. Did not have a fatal case.

DISCUSSION.

Dr. Byrd, of Quincy, had seen many cases of diphtheria, the last being his own child. The treatment he followed was to use a spray of lime water, chlorate of potash and iron alternately, and he had been successful; had cases where severe epistaxis existed, and had never lost a case, using that method.

Had a Jewish family come under his care. The oldest boy, Emmanuel, he treated with strong applications of nitrate of silver. He became better under the treatment, but a severe epistaxis set in and he died. His brother Solomon took sick and in a week was well. A sister, Zuleika, died; Albert, another member of the family, died in about twenty days. These he did not treat. A niece, a young lady, he treated with spray, and she recovered. A family called him in consultation with a physician attending. The attending physician was using quinine, salicylic acid and brandy. Suggested Dr. Billington's treatment. Was called some time after and saw one child had died and two were dying. The man and wife and remaining child were low. The brother-in-law had called for the former attending physician, who had refused to go. Applied the treatment I had recommended and saved all three, who are now living, although it is two years since. On this account I must say that I have some confidence in the treatment of diphtheria.

Dr. Hollister, of Chicago, wished the medical profession would take up diphtheria and study its pathology. Evidently there is an involvement and necrosis of the sub-mucous tissues. The question to resolve is, is there developed in that tissue an organic growth multiplying and causing necrosis; or is the presence of bacteria accidental? Have examined a number of cases of diphtheria, and have invariably found the *globus bacteria*. When the kidneys are involved and their function arrested, we find a blocking up of the tubuli uriniferi with bacteria. Is it probable that there is a germ development first arising in the fauces and developing in the blood, being carried to the capillaries, and by this means acting on the nervous centers?

With regard to local treatment the physician, after the first severe onset is passed, derives some satisfaction from it, and settles down to the use of some remedies which he thinks successful in his hands. If we look at the selection of remedies they

are such as destroy organic growths. My hobby, perhaps, is sub-sulphate of iron. Its astringency and effect on organic growths by destroying them prejudice me in its favor. It leaves a simple ulcer to treat and the disease is under our control then. The subject is one of vast importance, and it seems to me that every individual practitioner should devote his undivided attention to it.

Dr. Frank Davis, of Chicago—Dr. Hollister has expressed views similar to mine. I do not feel settled as to whether the primary disease is local and secondarily constitutional, or *vice versa*. I never saw a case early enough to notice local without general involvement. High fever, a rapid pulse, etc., in my experience, precede the presence of exudates. That there is an extremely debilitating and poisonous constitutional disease, there is no doubt. In a certain proportion of cases no form of treatment will save the patient, on account of the malignancy of the attack. Again there are other cases that will get well almost without treatment. The cases are numerous which require but little management, although that must be good. Have no faith in local treatment; look mainly to constitutional remedies. Tincture of chloride of iron, quinine in small and frequent doses, are what I use. In swallowing it, it performs the effect of a local medicine as far as the iron is concerned.

Diphtheria will be found closely allied in pathology to scarlet fever and erysipelas. There are cases combining the symptoms of both, and members of a family may get any of these.

Dr. ——— What do you think of croup?

Dr. F. Davis, of Chicago—Membranous croup has nothing to do with diphtheria.

As the case progresses if there is extreme prostration and symptoms tending to paralysis, give small doses of strychnia. Watch closely while giving digitalis, spirits of nitre or better, jaborandi, to counteract the albuminuria, if there be a tendency in that direction. In some cases the throat becomes involved to such a degree that swallowing is impossible. In young children I let them swallow their medicine, and for nourishment rub in the skin cod liver oil from 4 to 6 ounces in twenty-four hours. Had a patient to live a week in this manner; there was 20 grains of quinine in every 4 ounces of oil. The patient did not take a particle of nourishment during that time. I throw this out as a suggestion in cases where patients cannot be nourished.

Dr. H. Z. Gill, of Jerseyville—None will question the importance of the discussion. A paper I will read will show more clearly my opinions on this. The place of diphtheria in nosology is not well fixed at this time. We do not know exactly where it belongs, nor can we tell positively from any investigations or observations its causes. In reference to treatment I think Dr. Billington has done good work in publishing his cases, and his treatment is very successful, and if followed out carefully will, no doubt, be of great benefit.

Dr. C. Parks, of Chicago—I suppose it is accepted as a fact that bacteria are the cause of diphtheria. It is pretty well settled that it is a specific disease depending on that organism. I have come to the conclusion that 12 per cent of cases are fatal and 38 per cent recover, no matter what remedies you use. In regard to remedies I agree with Dr. Gill that the disease is local and constitutional, and ought to be treated both ways. I have no doubt that many cases have been greatly benefitted if not cured by local remedies. Equal parts of glycerine and liquor of persulphate of iron will not prevent constitutional results, but nevertheless helps a good deal. I have used, at the back part of the nose and throat, a weak solution of boracic acid by means of a syringe, the acid being dissolved in warm water. I cannot say that diphtheria is a local disease. The disease situated locally disappears from those parts and re-appears lower down. It becomes general and is followed by paralysis of the cardiac nerves, etc. It is absurd to treat it locally without general treatment, and the skin, rectum or anything else may be used as an absorbent. I think it requires local treatment in each case, and the best of constitutional.

Dr. J. S. Jewell, of Chicago—In treating diseases, this one especially, there is not stress enough laid to get at the disease early and do the best work during the first eight to ten hours. If any local treatment is to be applied, do it at first. When prompt treatment would have saved a patient, many a physician lets him succumb. Hundreds of children are sacrificed because they are not separated and kept from school, and not permitted to be approached by any one unless it be positively necessary. Every man should keep out of sight the stage machinery of argument when he calls on his patients. I verily believe that hundreds of lives could be saved annually by attending to these points, which, though not new, are important. Local treatment

is to be used assiduously during the first twelve hours. Let it be understood in your community that a doctor must be sent for immediately.

Dr. Ingalls, of Chicago—What is the treatment?

Dr. Jewell, of Chicago—Any treatment that the physician thinks good; for instance, the iron method mentioned, thoroughly applied. Many times an attack can be cut short if attended to soon enough.

Dr. Hollister, of Chicago—What is your constitutonal treatment?

Dr. Jewell, of Chicago—My constitutional treatment is vigorous, especially bromine, iron, quinine, etc. No matter how you give it, and don't wait till the pulse is up and nervous symptoms come on, but begin early and separate them.

Dr. Steele, of ———Do you separate them from bacteria?

Dr. Jewell, of Chicago—Children ought to be separated. Don't sacrifice your patients on account of speculative views.

Dr. Crummer, of Marshall—There is a point in the separation of diphtheritic patients. It must be done at an early period. Now in scarlatina we need not be so prompt. I have had good luck with diphtheria, but think that the severity of the epidemic had then worn itself.

Dr. Byrd, of Quincy—I believe in lime water and carbolic acid treatment. The first dissolves the membranes and the other is antiseptic. I forgot to mention how to thoroughly cleanse the nostril. I put a cork in the nostril and use a half ounce syringe and let in a gentle stream, first of salt and water.

Dr. Wadsworth, of Collinsville—Why is it, if bacteria be the cause we claim, that it relinquishes its hold after a time and becomes less strong?

Dr. Crummer, of Marshall—The difference of susceptibility of different individuals is the cause, and the least susceptible are the last to succumb, and naturally are more able to make a successful struggle with the disease.

[TO BE CONTINUED]

NORTHWEST MISSOURI MEDICAL ASSOCIATION.

The nineteenth quarterly meeting of the District Medical Society of Northwest Missouri was held in St. Joseph, Mo., commencing at 11 A. M., the President, Dr. A. Goslin, in the chair; Dr. D. I. Christopher, Secretary.

On calling the roll, the following members responded to their names: Drs. T. M. Lowry, W. H. Bryant, W. I. Heddens, H. Trevor, E. A. Donelan, C. J. Siemens, Thos. Doyle, J. Geiger, J. M. D. France, J. M. Richmond, S. F. Carpenter, E. M. Manning, B. L. G. Stone, J. S. McAdow, J. T. Berghoff, J. M. Huffman, F. A. Simmons, J. B. Howard, W. B. Craig, B. P. Williamson, J. R. Kearney, A. B. Allen, A. P. Busey, C. F. Knight, J. D. Smith, P. J. Kirschner, J. W. Heddens.

The minutes were read and approved.

The committee made the following report on programme for afternoon session:

2 P. M.—Paper, by Dr. W. H. Bryant. 3 P. M.—Paper, by Dr. J. W. Heddens. 4 P. M.—Paper, by Dr. J. Leigh, and reports of cases, exhibition of specimens and voluntary contributions.

Evening session: Paper, by Dr. W. B. Craig. Voluntary papers and discussion of regular subject, viz: "Alcohol as a Remedial Agent."

The society adjourned to 1:30 P. M.

AFTERNOON SESSION.

Society met pursuant to adjournment, President Dr. A. Goslin in the chair; Dr. D. I. Christopher, Secretary.

Dr. Bryant not having a paper, reported two cases of vaginismus, with treatment; also presenting a lot of tubes for the dilatation of vagina in this disease.

Dr. J. W. Heddens read a very interesting paper on "Strictures of the Urethra," claiming masturbation as a cause second only to gonorrhœa. Some remarks were made on the paper by Drs. Richmond and Geiger.

Dr. Leigh being absent, the rules, on motion, were suspended to allow Dr. Allen to present a case. It was moved and carried that a committee be appointed to examine the case and report to the society their opinions for discussion. The Chair appointed Drs. Geiger, Craig and Richmond.

While the committee was out, Dr. Doyle reported a case of uterine retroversion, with contracted canal, and upon the introduction of sponge tents, a flow of milk was produced. This was repeated two or three times with the same results, the flow ceasing during intervals.

Dr. McAdow also reported a case of the production of the lacteal fluid by the manipulation of the breasts by a child.

Dr. Stone reported some cases resembling diphtheria and scarlatina.

The committee on Dr. Allen's case reported chronic synovitis with astitis of the ankle-joint. The patient was then brought before the society for examination, following which a number of the members made remarks on the cause, diagnosis, treatment and prognosis.

Dr. Geiger presented a case of dislocation of ulna and radius backwards of ten weeks' duration.

On motion the society adjourned to 7 P. M.

EVENING SESSION.

The society met pursuant to adjournment, the President in the chair; D. I. Christopher, Secretary.

Dr. Craig read a scientific paper on "Gastro-Elytrotomy," which was received. The paper was discussed by Drs. Richmond, Geiger and Goslin.

Dr. Simmons also read quite an instructive paper entitled, "Is Phthisis Curable?" calling the attention of the society to the new treatment by the benzoate of soda spray and compressed air. The paper was received by the society, and discussed by the following members, viz: Drs. Simmons, Christopher and Doyle.

The regular subject for discussion, viz: "Alcohol as a Remedial Agent," was taken up and discussed by Drs. Manning, Richmond, Stone, Doyle, Geiger, Siemens, Donelan, Christopher, Heddens, Wm. Simmons and Craig.

The Executive Committee reported the following programme for the next quarterly meeting: Essayists—Drs. W. H. Bryant, J. Leigh, J. M. Huffman, A. Goslin, P. J. Kirschner, E. M. Manning. Subject for discussion, "Pneumonia."

After some remarks by the President for the good of the members, on motion the society adjourned.

A. Goslin, M. D., President.

., Recording Secretary.

Correspondence.

Hydrate of Chloral.

Dr. H. H. Kane, of New York City, specially requests members of the profession with any experience whatever in the use of hydrate of chloral to answer the following questions, and give any information they may possess with reference to the literature of the subject:

1. What is your usual commencing dose?
2. What is the largest amount you have administered at one dose, and the largest amount in twenty-four hours?
3. In what disease have you used it (by the mouth, rectum, or hypodermatically), and with what results?
4. Have you known it to affect the sight?
5. Have you ever seen cutaneous eruptions produced by it?
6. Have you known it to affect the sexual organs? If so how?
7. Do you know any instances where death resulted from or was attributed to its use? If so, please give full particulars as to disease for which given; condition of pulse, pupils, respiration, and *temperature*; manner of death; condition of heart, lungs and kidneys; general condition, age, temperament, employment, etc., etc., etc. If autopsy was held, please state the condition there found.
8. Have you seen any peculiar manifestations from chloral—as tetanus, convulsions, or delirium?
9. Do you know of any cases of the chloral habit? If so, please state the amount used, the disease for which the drug was originally administered, the person's temperament, and the present condition of the patient with reference to the condition of body, mind, in general, and the various organs and systems in particular.

Physicians are earnestly requested to answer the above questions *fully*, especially 7 and 9, in order that the resulting statistics may be as valuable as possible.

All communications will be considered strictly confidential, the writer's name not being used when a request to that effect is made. Address all letters to Dr. H. Kane, 191 West Tenth Street, New York City.

Editorial.

The Southern Illinois Medical Association.

This Society meets in Shawneetown on the 23d of this month. As this Journal is its official organ, its proceedings will be laid before our readers. Drs. John T. Hodgen, C. H. Hughes and William Dickinson, of this city, will each deliver popular addresses.

The American Laryngological Association.

The American Laryngological Association held its second annual session in New York City on May 31st, June 1st and 2d. It numbers now about twenty members, who reside in different parts of the Union, but most of them hail from the Atlantic States. Its transactions this year will form quite a large and valuable volume. They will first appear in the *Archives of Laryngology*, a new quarterly devoted to Laryngology exclusively, issued first in last April, and published by G. F. Putnam's Sons, of New York. A synopsis of the entire proceedings, with criticisms on each article, will be placed before our readers as fast as they appear in the *Archives*.

The American Medical Association.

This fast growing association met in New York City on June 1st, 2d, 3d and 4th. We have not the room nor time to give even a short synopsis of its proceedings in this number of the JOURNAL, but in the next issue we will give our readers the outline of the papers and discussions.

This was one of the largest and most successful meetings that it has been our pleasure to attend. The importance of the papers and the discussions were far superior to the average of its previous meetings. Its President, Dr. Sayre, made several excellent recommendations. One of the best, in our judgment, was that the proceedings be hereafter published in journal form,

instead of their being eternally buried in an illy bound book that is given to the hearers *only*. This is following out *our own* idea of the manner in which the proceedings of every medical society should dispose of their transactions. Replies to papers could be made, after the adjournment of the meeting, if published in this way, to the edification of every hearer and reader, and in this way not only keep up but heighten the interest of the meeting.

Our readers will be pleased to learn that Missouri has been honored by placing one of our most distinguished surgeons in the Presidential chair, Prof. John T. Hodgen. In order to best show our appreciation of this honor, we of this State should resolve that at the next meeting, which takes place at Richmond, Va., we will have the largest delegation of any Western State. Every county in which there is no medical society should, as soon as possible, complete such an organization, so that from every county we can, next May, send delegates to Richmond.

YELLOW FEVER.

An elaborate and thorough treatise on the nature and epidemic causes of yellow fever is now in press, and will be published by George O. Rumbold & Co. by the first of August next. Its author is our townsman, Dr. C. Spinzig, well known to the profession from previous publications, whose mode of investigation, it gives us pleasure to state, is always strictly scientific and most profound. He gives for every point of argument fundamental facts, which are, in this case at least, convincing and conclusive. Further, the author has spared no pains to obtain all reliable and statistical data, in order to lay before the reader a complete history of the great epidemic of 1878, and has also included all known facts of the epidemics of 1873, 1876 and 1879. It promises to be not only of great interest, but to be an indispensable part of every medical man's, sanitarian's, and scientist's library, as the subjects, Etiology and Prophylactics, are treated of in an original manner, and the views are entirely different from those generally held by the profession.

Book Reviews.

Elements of Modern Chemistry. By Adolph Wurtz, Professor of Chemistry of the Faculty of Medicine of Paris, etc., Translated and Edited by Wm. H. Green, M. D., formerly Demonstrator of Chemistry in Jefferson Medical College. [Philadelphia: J. B. Lippincott & Co., publishers.]

This is a work of more than usual merit. Having carefully read much of it, I am satisfied that as a whole, it has no superior, hardly an equal. The student as well as teacher, will find it invaluable, indeed indispensable. Though in some particulars it is not so full as others, yet in other particulars it is superior. If the first principles of the science were as fully discussed as in Barker, the work would still be more valuable and desirable. As it is, we cannot commend it too highly.

H. Christopher.

A Text Book of Physiology. By M. Foster, M. A., M. D. From the Third and Revised Edition; with Notes and Additions by Edward T. Reichert, M. D. [Philadelphia: Henry C. Lea's Son & Co. 1880.]

This is a reprint of the edition of Dr. Foster's Physiology, recently noticed in the Journal. It is difficult to understand what object or excuse there is for this kind of republication. Dr. Foster has written an admirable book and procured its publication in admirable style and placed it upon the American market. He certainly should be allowed to reap the benefits of his labor. Dr. Reichert, by republishing the work and offering it for sale at lower rates, deprives Dr. Foster of a part of these benefits. Whatever additions Dr. Reichert may have made are of no consequence as to the matter in question. The principle is the same—the result being, that the sale of Dr. Foster's book is diminished by the same book being thrown upon the market by another and cheaper publishing house. As a matter of fact the additions made to this book are not physiological additions, but consist merely in the addition of a few pages of anatomy and therapeutics. In the advance of science and division of labor, anatomy and therapeutics have become separate studies of themselves, and since so many fine works are written upon these subjects it is difficult to see why this matter should be injected into our works on physiology. This is one of the good features of Dr. Foster's book, that he deals only with physiological facts and theories, leaving other subjects to the departments to which they belong. No one will deny that the knowledge of the anat-

omy of the eye is necessary to a knowledge of its physiology, but it does not follow that information on both these subjects should be given in the same book. I see no other object in these "additions" than to give the book the appearance of greater simplicity in the eyes of American students. One feature, however, in this work is deserving of praise, viz: the addition of a large number of valuable illustrations. And equally praiseworthy is the omission of the various large figures of instruments illustrating the vascular and nervous mechanisms, etc., which appear in the original work. H. C. FAIRBROTHER.

A SYSTEM OF MEDICINE. Edited by J. RUSSELL REYNOLDS, M. D., F. R. S. With numerous additions and illustrations. By HENRY HARTSHORNE, A. M., M. D. In three volumes. Vol. III, Diseases of the Digestive Blood, Glandular, Urinary, Reproductive, and Cutaneous Systems. Pp. 986; 8vo. [Henry C. Lea's Son & Co. 1880.]

This is the third volume of this incomparable work on the practice of medicine. A mere statement of the writers of the articles that compose the book, is a sufficient recommendation of its worth. The diseases of the Stomach is written by Wilson Ford, M. D., F. R. S., and occupies 49 pages. Diseases of the Mouth. By Charles E. Squarry, M. D., occupies 11 pages. Mr. Squarry also is author of the Diseases of the Fauces, Pharynx and Œsophagus. Diseases of the Intestines is written by Drs. Wardell, Bristowe, Begbie and Goodeve. Diseases of the Periosteum, by Drs. Wardell and Bristowe. Of the Liver, by Drs. Anstie, Maclean, Goodeve, Begbie and Wardell. Diseases of the Blood, Glandular System, by Drs. Wardell, Grower, Wilks, Bergel, Hartshorne and Brinton. Diseases of the Urinary Organs, by Drs. Basham, Roberts, Beck and Thompson. Diseases of the Female Reproductive Organs, by Drs. Hewitt, Priestly, Williams and Hartshorne. The Diseases of the Cutaneous System, by Mr. A. B. Squire. These three volumes contain the latest and most advanced views in the practice of medicine that are known in the civilized world.

Books and Pamphlets Received.

Aspiration of the Knee-joint. By Henry O. Marcy, A. M., M. D. [Reprinted from the Transactions of the American Medical Association, 1879.]

Fifty-third Annual report of the Inspectors of the State Penitentiary for the Western District of Pensylvania. For the year 1879.

The New Anæsthetic, Ethyl Bromide; Or Hydrobromic Ether.

Lecture on Pain and Anæsthetics, Delivered by Invitation before the Class of the Pensylvania College of Dental Surgery, Philadelphia, Feb. 6th, 1880. By Laurence Turnbull, M. D., [Reprinted from "*Medical and Surgical Reporter.*" March 6th, 1880.]

Annual Report of Saint Louis Insane Asylum for the year 1878-9. By Chas. W. Francis, Health Commissioner. [Saint Louis, 1879.]

Diseases of the Maxillary Sinus. By E. Borck, M. D., of St. Louis. [Reprinted from the *Indiana Med. Reporter.*]

Thirty-ninth Annual Announcement of the St. Louis Medical College. Session of 1880-81 and Catalogue for 1879-80.

Lunacy Reform. III. Our Asylums as seen by a competent Foreign Visitor. [Reprinted from the *Archives of Medicine.* Vol. III. No. 2. April 1880.]

The Relation of Membranous Croups to Diptheria. By J. O. Roe, M. D., of Rochester, N. Y. [Read before the Monroe County Medical Society.] [Reprinted from the *Buffalo Medidal and Surgical Journal*, March 1880.

The Prospective Advantages of Baltimore as a Medical Centre. By John Van Bibber, M. D., Reprint from *Maryland Medical Journal.* April 1880. Baltimore, 1880.

Common Mind, Troubles and the Secret of a Clear Head. By J. Mortimer-Granville, M. D., M. R. C. S., etc., Edited with Additions, by an American Physician, Philadelphia: D. G. Brinton, 115 South 7th street, 1880. I vol. crown, 8 vo., cloth; pp. 185.

A Case of Intra-uterine Ichthysis. By Wm. R. Smith, Sr. M. D., Cairo, Ill., (with three wood cuts.) Reprinted from the *American Journal of Obstetrics and Diseases of Women and Children.* Vol. XIII. No. II. April, 1880. [New York: William Wood & Co., 27 Great Jones street, 1880.]

AMERICAN HEALTH PRIMERS—Our Homes. By Henry Hartshorne, A. M., M. D. [Philadelphia: Presley Blakiston, 1012 Walnut Str., 1880.) For sale in St. Louis by the Hildreth Pub. Co., 407 N. 4th Street.

A Practical Hand-book of Medical Chemistry applied to Clinical Research and the Detection of Poisons, Partly based on "Bowman's Medical Chemistry." By Willliam H. Greene, M. D., pp. 310. Large 16 mo. [Philadelphia: Henry C. Lea's Son & Co. 1880.]

Headaches; their Nature, Causes and Treatment. By William Henry Day, M. D. Third Edition, with Illustrations, pp. 322 16 mo. [Philadelphia: Lindsay & Blakiston. 1880. For sale in St. Louis by H. R. Hildreth & Co., 407 N. 4th Street.]

Sore Throat, its Nature, Varieties and Treatment; Including the Connection between Affections of the Throat and Other Diseases. By Prosser James, M. D., Fourth Edition, Illustrated with Hand Colored Plates. pp. 318. 16 mo. [Philadelphia: Lindsay & Blakiston, 1880. For sale in St. Louis by H. R. Hildreth & Co., 407 N. 4th Street.

Dessicated Blood for Rectal Alimentation and other Literature on the subject of Alimentation per Rectum. Reprinted from *Medical Record* and from papers read before the New York Academy of Medicine, Therapeutical Society and Gynæcological Society. Detroit Michigan, 1880.

Transactions of the Society of the Alumni of the Medical College of Ohio. Published by order of the Society. [C. S. Muscroft, M. D., Secretary. 8 vol. pp. 176 mo. 1880.]

On the Removal of Foreign Bodies From the Eye, with four cases. By Charles Stedman Bull, M. D. Reprinted from the *Archives of Ophthalmology*. Vol. IX. No. 1. March, 1880.

The Hysterical Element io Orthopædic Surgery. By Newton M. Shaffer, M. D. pp. 66; 8 vo. [New York: G. P. Putnam's Sons.]

Annual Report of the Managers of the Western Pennsylvania Hospital for 1879. Medical and Surgical Department. Twelfth Ward, Pittsburgh, Pa.

Modern Medical Therapeutics; A Compendium of Recent Formulaæ and Specific Therapeutical Directions. From the practice of eminent contemporary physicians, American and foreign. By George H. Napheys, A. M., M. D., etc. Seventh edition, enlarged and revised. pp. 604; 8 vo. [Philadelphia: D. G. Brinton.]

Homeopathy; What is it? A Statement and Review of its Doctrines and Practice. By A. P. Palmer, A. M., M. D. pp. 204; 8 vo. [Detroit: Geo. S. Davis, Medical Publisher.]

Remarks on Rectal Feeding in Disease. By William Potter, M. D., Batavia, N. Y. [Reprinted from the Medical Record, April, 1880.]

Thomas Keith and Ovariotomy. By J. Marion Sims, LL. D. With portrait. [Reprinted from the American Journal of Obstetrics and Diseases of Women and Children. Vol. XIII, No. 2, April, 1880. [New York: William Wood & Co.]

Third Report of the Pennsylvania Free Dispensary for Skin Diseases, Philadelphia, for the medical relief of the poor affected with diseases of the skin. Supported by voluntary contributions.

Caries of the Ankle in Children. The results of Expectant Treatment from a study of Thirty Cases. By V. P. Gibney, A. M., M. D, A paper read at the New York State Medical Society, February, 1880. [Reprinted from the American Journal of Obstetrics and Diseases of Women and Children. [New York: Wm. Wood & Co.]

Periarthritis: A Study of Forty-seven Cases. By V. P. Gibney, A. M., M. D. Reprinted from the New York Medical Journal, May, 1880. [New York: D. Appleton & Co.]

The Black Arts in Medicine, with Anniversary Address by John D. Jackson, A. M., M. D. Edited by L. S. McMurtry, A. M., M. D. pp. 84; 12 mo. [Cincinnati: Robert Clarke & Co.

Aids to Physiology. By B. Thompson Lowne, F. R. C. S., Eng. [New York: G. P. Putnam's Sons.]

Aids to Chemistry. Part I, Inorganic; the non-metallic elements. By C. E. Armand Semple. Part II, Inorganic. the Metal. By C. E. Armand Semple. Part III, Organic. By C. E. Armand Semple.

Aids to Materia Medica and Therapeutics. Part II (double part), the vegetable and animal substances. By C. E. Armand Semple.

Pathogenetic Outlines of Homœopathic Drugs. By Dr. Med. Carl Heinigke, of Leipzig: Translated from the German by Emil Tietze, M.D., of Philadelphia. Pp. 576, 8vo. Boericke & Tafel. [New York and Philadelphia, 1880.]

Lessons in Gynecology. By William Goodell, A. M., M. D., with ninety-two illustrations. Pp. 454; 8vo. [Philadelphia, Pa.: D. G. Brinton, 1880.

A Treatise on Oral Deformities, as a Branch of Mechanical Surgery. By Norman W. Kingsley, M. D. S., D. D. S.; with over 350 illustrations; 8vo.; pp. 541. [New York: D. Appleton & Co., 1880.]

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—MAY, 1880.

Day of Month.	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	**45.0**	73.5	18	67.0	87.5
2	53.0	78.5	19	69.0	86.0
3	54.0	79.5	20	64.0	73.5
4	60.0	76.0	21	63.0	73,0
5	59.0	83·5	22	61.0	82.0
6	64.0	89.0	23	65.5	85 0
7	66.5	**90.0**	24	65.5	90.0
8	68.5	84.0	25	72.0	86.5
9	61.0	77.0	26	71.0	88.0
10	71.0	75.5	27	65.5	72.0
11	62.5	77.0	28	61.0	77.5
12	61.0	84.0	29	61.5	79.0
13	64.0	84.0	30	61.0	77 0
14	59 5	75.5	31	66.5	86.0
15	54.0	77.0			
16	57.0	82.5	Means	62.5	
17	63.0	88.0	Monthly Mean	71.8	81.2

Quantity of rain, 3.28 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM MAY 8, 1880, TO MAY 29, 1880, INCLUSIVE.

Ovarian Tumor.... 1	Leucocythæmia... 2	Convulsions & Trismus Neonatorum 30	Scorbutus 1
Measles..... 5	Inanition, Want of Breast Milk, etc. 6	Hydrocephalus and Tub. Meningitis. 4	Apoplexy 4
Syphilis..... 1	Alcoholism.. 5	Meningitis & Encephalitis 8	Cyanosis and Atelectasis..... 3
Scarlatina..... 4	Rheumat'm & Gout 1	Other Diseases of the Brain and Nervous System 11	Premature Birth 4
Pyæmia & Septicæ 0	Cancer and Malignant Tumor..... 5	Cirrhosis of Liver and Hepatitis... 7	Deaths by Suicide 2
Erysipelas 2	Phthisis & Tuberculosis, Pulmon. 30	Enteritis, Gastro-Enteritis, Peritonitis, and Gastritis 14	Deaths by Accid't 9
Diphtheria 3	Bronchitis..... 6	Bright's Disease and Nephritis... 2	Deaths by Homicide
Membran's Croup. 2	Senility 4	Other Diseases of Urinary Organs. 2	Congen Detor'ty.. 5
Whooping Cough. 3	Pneumonia.....28	Surgical Operat'n 1	Total Deaths from all Causes.....324
Diabetes Melitius. 1	Heart Diseases .. 13		Total Zymotic Diseases 80
Cholera Infantum. 22	Other Diseases of Respir'y Organs 16		Total Constitutional Diseases..... 80
Typhoid Fever.... 5	Metro-Peritonitis. 1		Total Local Diseases 144
Cerebro Spinal Fe. 1	Marasmus — Tabes Mesenterica and Scrofula 18		Total Develop'tal Diseases 16
Remittent, Intermittent, Typho-Malarial, Congestive & Simple			Deaths by Viol'ce 12
Contin'd Fevers, 6			
Puerperal Fevers.. 2			
Diarrhœal Disea's 12	Vermes..... 1		

CHAS. W. FRANCIS, *Health Commissioner.*

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Under these circumstances, it is unreasonable to suppose that the various manufactures of fluid extracts, elixirs, pills, etc., (who attracted by the high reputation of our Extract of Malt), have recently in various sections of the country, undertaken the manufacture of a similar article, should generally succeed in producing it of a quality according to the fulsome praise with which their avertisements are filled. While being perfectly willing to let the reputation of our Extract of Malt rest upon its real merits, we owe it to the medical profession, as well as to ourselves, to give warning against imposition.

It has come to our knowledge that certain articles extensively advertised as "pure" and "genuine extract of malt," are composed chiefly of the substance called GRAPE SUGAR OR MALTINE, which, as is well-known, is the product of the action of the sulphuric acid upon starch subjected to a high temperature. This artificial grape sugar of glucose, which is extensively manufactured from corn starch, is now being used in immense quantities, instead of ordinary cane sugar, in the sophistication of confectionery sugar, house syrup, "strained honey" native wines, and canned fruits, and by some brewers in the manufacture of beer and ale. The cheapness of this artificial product of Indian corn, constitutes the chief inducement for this species of substitution for barley malt and sugar cane.

Again, an extract of malted grain is manufactured for the purpose of obtaining *diastase*, which, (simple and variously combined) is much used in medicine. The appearance of the extract is but slightly changed by being deprived of this important constituent, although, it is unnecessary to add, that its value as a medicinal agent is thereby greatly impaired. Nevertheless, this very substance, which is little more than refuse material, in the manufacture of diastase, is now being offered for pure malt extract.

It is *malt extract* prepared from barley malt combined with the proper proportion of hops, that has been for many years the standard medicinal nutritive employed by the medical faculty of Europe, and especially of Germany. Its value has been established by experience, and its use in the treatment of almost all forms of disease of nutrition is constantly extending. We shall continue to devote the most scrupulous attention to the maintenance of the reputation of our malt extract, by the careful selection of material and by unwearied personal attention to manufacturing details.

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Very respectfully,
TROMMER EXTRACT OF MALT CO.

FROM ZIEMSSEN'S CYCLOPÆDIA OF THE PRACTICE OF MEDICINE, VOL. XVI, PAGE 474 :

"The Malt Extract prepared from Trommer's receipt is designed to fulfill much the same purpose as cod liver oil, carbo-hydrates (malt sugar, dextrine), taking the place of fatty matter. The simple (much or little hopped) and the chalybeate form of Malt Extract are coming more and more into favor as substitutes for the oil ; they are more palatable and more easily digested, and should, therefore, be preferred in the dyspeptic forms of anæmia. During the last few years Malt Extract has almost entirely taken the place of cod liver oil in the treatment of phthisis, and other wasting diseases at the Basle Hospital, and we have as yet found no reason for returning to the use of the latter remedy. The Extract may be given from one to three times a day in doses varying from a teaspoonful to a tablespoonful in milk, broth, beer or wine."

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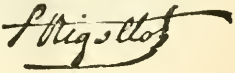

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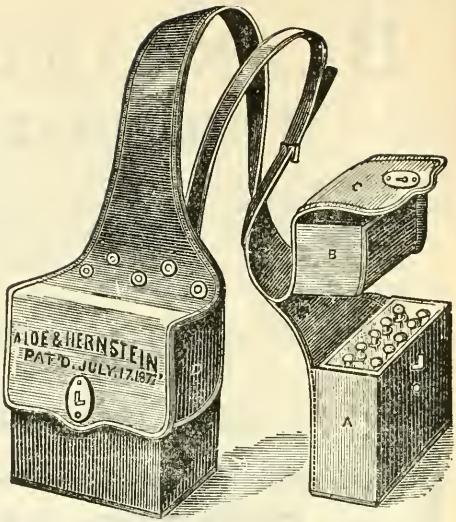

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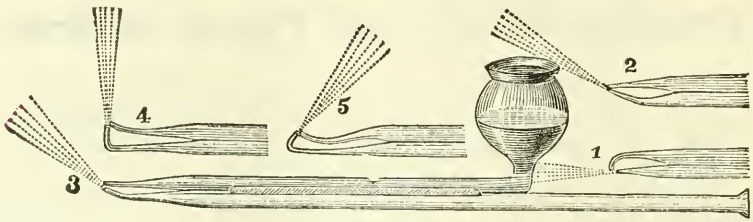

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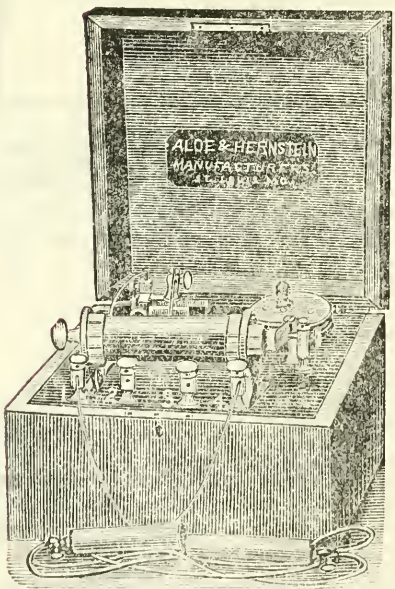

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THE USE OF DEXTRO-QUININE IN INTERMITTENT FEVER

Case.	Name and sex of patient.	Age, etc.	Number of paroxysms before Taking.	No. of paroxysms after.	Dose and mode of Exhibition.	Total amount Exhibited.	Remarks, Pathological and Physiological Phenomena, Etc.	Reported by.
85	J. W. D., male. *Quotidian.*	63	3	0	2 grs. every two hours.	14 gr.	It was a case of slow fever, which had terminated in a quotidian intermittent. Patient had taken quinine at times for the past 35 years. No unpleasant symptoms or ringing in the head from this *Dextro-Quinine.* N. B.—This patient was opposed to quinine, as he insisted that it always produced unpleasant symptoms and ringing in his ears, but he admitted that he experienced no unpleasant symptoms from the *Dextro-Quinine.*	T. G. Comstock, M.D., Good Samaritan Hospital, St. Louis Mo.

After a year's experience with DEXTRO-QUININE, Dr. T. G. Comstock writes us under date of November 21st, 1879, as follows:

"I take great pleasure in making known to you a general report of my experience with your preparation of Dextro-Quinine. I have not kept accurate reports of the cases where I used your preparation, but I have, for the past year, employed it in several hundred cases, of all forms of diseases, complicated with paroxysms intermitting in character, such diseases depending upon malaria as a primary cause or aggravation. I employ it almost daily, in not only clear cases of intermittents, but especially in Neuralgias. I have by no means abandoned the use of sulphate of quinine, but in a large experience I have found your Dextro-Quinine to take the place of the sulphate in more than one-half of the cases where I previously should have given the last named preparation. The Dextro-Quinine produces much less 'tinnitus aurium' than the sulphate, and the majority of patients do not experience any ringing of the ears whatever. I am very glad to take this opportunity to express to you my greatest confidence in the efficacy of the new preparation as a reliable antiperiodic. It has, for some months past, been frequently prescribed by the attending physicians of the Good Samaritan Hospital in this city, and the other members of the medical staff of the hospital, as well as myself, have confidence in its efficacy.

Yours very respectfully,

T. G. COMSTOCK M. D."

102	James C., male, *Tertian Ague.*	17	3 months	0	20 grs. in 5 gr. doses during intermission.	20 gr.	Had taken cinchonidia repeatedly but it kept returning. Severe tinnitus aurium. No return in six weeks.	D. H. Chase, M., D., Hoosier Prairie, Clay county, Ill.
103	Mary W., female. *Tertian.*	10	5 months	0	15 grs. in 4 doses day before the paroxysm.	25 gr.	Did not complain of quinism. No return in 4 weeks.	D. H. Chase, M. D., Hoosier Prairie, Clay county, Ill.
104	J. M., female, *Quotidian*	3	3	0	6 grs. in 2 doses during intermission.	6 grs	Was active determination to brain and spasms during the fever; but the *Dextro-Quinine* did not affect the head. Well now for six weeks.	D. H. Chase, M. D., Hoosier Prairie. Clay county, Ill.
106	M. Carragan, male.	43	2	0	3 grains every 2 hrs. until 3 doses only were given on the evening before the coming chill in the morning.	9	After taking the second powder he began to perspire freely. Could not stand Sulph. Quinine. No unpleasantness from the DEXTRO-QUININE. This case was treated by the sample sent to me by mail. It worked like a charm. Shall give it a fair trial.	H. L. Cokenower, M. D., Pleasant Plains Ill.
125	William Tannahill.	32	Every 7 days for about one year.	One slight symptom. Is now well.	I gave it in 5 gr. doses allowing patient to take 6 doses day before chill day, then 1 two gr. pill every day for 6 days, and repeat former dose as before. This was done for 28 days.	120 gr.	Patient was reduced physically by the long recurrence of these paroxysms so that his life had almost become a burden. His digestive powers were *markedly* compromised. He had been treated by all the Cinchona alkaloids without arrest of the paroxysms.	E. Newton Campbell, M. D., Walnut Grove, Illinois
161	W. H. male Had tried everything without success.	[illegible]	Many & constantly for six months	1	20 grains in six powders, 1 every 2 hours. Commencing after the paroxysm.	30 grs	Patient has had ague for at least six months; said he had tried almost everything—was entirely discouraged. It has been two months since the last of the *Dextro-Quinine* was taken. No return of the paroxysms and "Richard is himself again."	E. Newton Campbell, M.D., Walnut Grove, Illinois.

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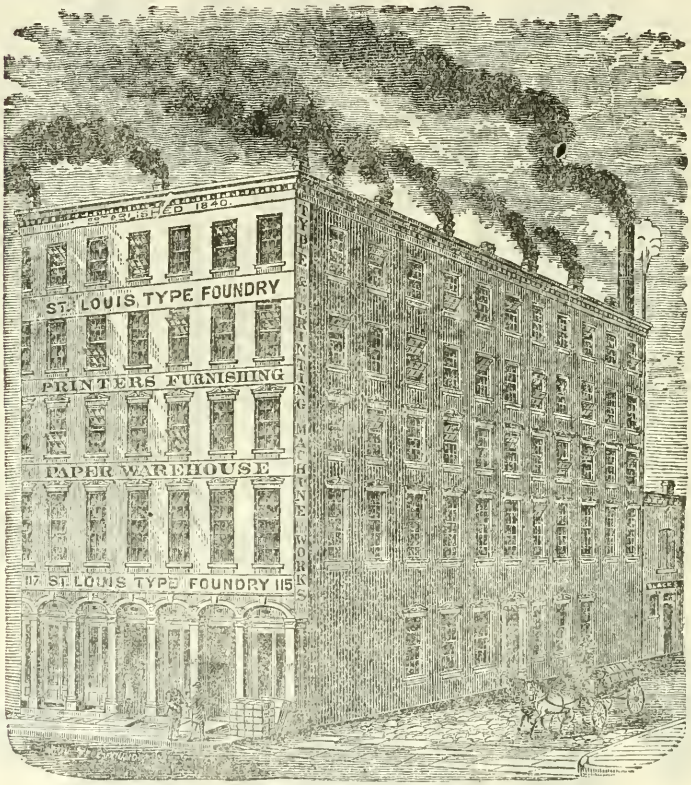

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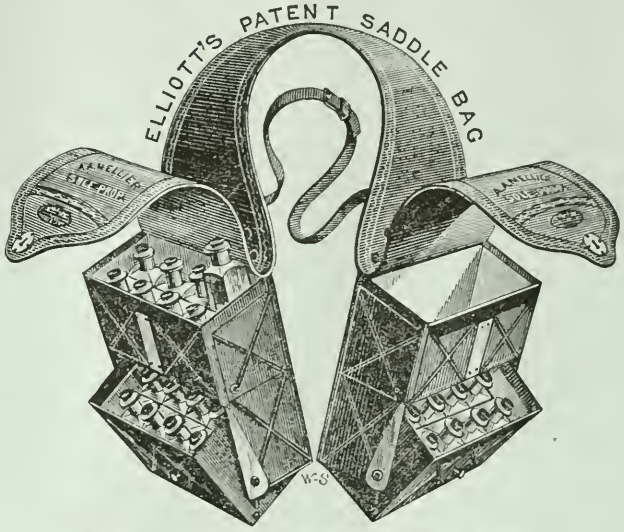

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We ask for it a thorough trial, under the belief that it will prove a valuable addition to the list of remedies commonly employed in rheumatism. It is regarded by the Brazilians as almost a specific in the chronic form of the disease.

Extract Duboisia. We are just in receipt of a direct importation of this rare and expensive drug. Duboisia, although scarcely two years before the profession of this country, has already largely supplanted atropia, formerly regarded as indispensable as a mydriatic, in the practice of ophthalmology. Its action on the eye is similar to that of atropia, dilating the pupil and paralyzing the muscles of accommodation, but is much more prompt and is attended by none of the disagreeable effects of that salt, irritation of the conjunctiva, dryness of the throat, and, in children, hallucinations, delirium, etc.

Gelatine Products. We would ask the especial attention of the medical profession and pharmacists to our line of gelatine and gelatine-coated preparations, comprising Empty Capsules, Improved Rectal Suppository Capsules, and Gelatine-coated Pills. Our facilities for the manufacture of these articles are unsurpassed, and the perfection to which we have brought them is due to the sparing of no expense in the securing of the best methods and the most experienced skill. We confidently ask a comparison of our Gelatine preparations with those of any other maker. We have but recently added Gelatine-coated pills to our stock, preferring to delay manufacturing them until we should be able to perfect a process through which the objections to gelatine-coated pills, as heretofore offered, might be entirely overcome. Our process is the result of years of experiment, and the expenditure of much capital. We claim for it complete freedom from the objections which attached to all the methods previously employed.

Gelatine Capsules. The desirability of some neat and expeditious method for the administration of bitter or nauseous drugs, will be particularly manifest to physicians during the spring months, in which the demand for quinine, especially in malarial districts, is large. By using our capsules the disagreeable taste of the most disagreeable drug may be completely obviated, and the patient saved the disturbance arising from nausea and repugnance.

Capsule Fillers. To enable us to supply the physician with the means of utilizing to the fullest degree the many advantages attending the employment of gelatine capsules, we have taken the agency for two very ingenious capsule fillers, known respectively as Davenport's and Whitfield. With one of these instruments, capsules may be filled in much less time, than it would take to prepare powders or to make pills.

Send for full descriptive circular of these instruments.

For Sale by Wholesale Druggists.